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A. G. Walt

ESQUIROL ON INSANITY.

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MENTAL MALADIES.

A

TREATISE ON INSANITY.

Jean Étienne Dominique

BY E. ESQUIROL,

PHYSICIAN-IN-CHIEF OF THE MAISON ROYALE DES ALIÉNÉS DE CHARENTON, FORMERLY INSPECTOR-GENERAL OF THE UNIVERSITY, MEMBER OF THE ROYAL ACADEMY OF MEDICINE, ETC.

TRANSLATED FROM THE FRENCH, WITH ADDITIONS,

BY E. K. HUNT, M. D.

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TRANSLATOR'S PREFACE.

The writings of Esquirol have long been regarded by those most competent to decide upon their merits, of high authority on all matters pertaining to insanity. In addition to a sound and vigorous intellect, improved by long and close application to study; his habits of order and systematic observation, together with his vast experience, offer to the reader of his work, a sure pledge of accuracy and extent of research, as well as valuable philosophical deductions.

No one at all conversant with the subject on which he treats, will fail to observe, that he speaks from the abundant stores of practical knowledge; every thought which he expresses, and every suggestion that he makes, carrying with it the force of truth, and the evidence of profound investigation. It will be noticed that he is extremely cautious in his statements, plain and precise in his account of cases, and avoids, for the most part, all theoretical speculations. In his treatment, he will be found judicious, and more active than the majority of French practitioners. Judging from the whole tenor of his work, as well as from examples, furnished at intervals throughout its pages, the reader will justly infer, that in relation to the moral regimen of the insane, "the law of love" is that to which our author yields his assent, and that which reigns in those Institutions over which he has presided.

On both these interesting and important topics, the translator has briefly, though he believes fully enough, expressed the views, so far as known, of the profession in this country. With respect to several other points, brief, yet

free comment has been made, as well for the purpose of elucidating truth, as for that of expressing the views, at present prevailing on this side the Atlantic.

All that portion of this Treatise, relating properly to insanity, has been published entire; the remainder, referring, for the most part, to the statistics and hygiène of establishments for the insane, together with the medico-legal relations of the subject, have been omitted; as they would only serve to increase the size and expense of the volume, without adding materially to its intrinsic value.

The translation has been made, with the intent to furnish to the public and profession, a faithful and accurate rendering into our own language, of the opinions, sentiments and practice, of one who had no superior in the department to which he devoted his life. For those errors, whether of "omission or of commission," which may appear, the translator claims only that measure of courtesy, which may be fairly accorded to undertakings of this character.

E. K. HUNT.

Hartford, February, 1845.

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PREFACE.

The work now offered to the public, is the result of forty years' study and observation. I have noticed the symptoms of insanity, and have studied the manners, habits, and wants of the insane, in the midst of whom I have passed my life. I have also tried the best modes of treatment. Confining myself to facts, I have arranged them according to their relations. I have stated them as they have been observed, without, in general, attempting to explain them; and have avoided systems, which always appeared to me more seductive by their splendor, than useful in their application.

The materials of this work, collected at the Salpêtrière, at the Hospital at Charenton, and in my private practice, have been successively published in the Dictionary of Medical Sciences, and other medical works.

While, as it respects principles, they remain the same, many of these materials have been subjected to various modifications, and drawn out into more detail, in order that they may more perfectly harmonize with my later observations. Some of these have been translated into various languages, and published by German, and Italian Physicians; and I trust that the result of all my labors, which I have reviewed with the greatest care, and now publish for the first time, will be favorably received by medical men.

Most highly do I appreciate the advantages of a work, systematically arranged; and without doubt, my book would be read with more interest, if a general idea pervaded all its parts. But it would engage me in a labor, incompatible with my numerous avocations: nevertheless, we shall find a methodical connection, in the distribution of the materials of which it is composed.

The first Chapter, entitled Insanity, is a summary of the sentiments prevalent on this subject; the remaining ones, are commentaries, and a more full exposition of these views.

Having taken part in the earliest efforts that were made to ameliorate the condition of the insane, I have aided in their fulfillment, both by my writings, my teachings, and travels.

Happy shall I be, if this new publication, notwithstanding its imperfections, may contribute to overcome prejudices, to dissipate errors, to throw light upon obscure points connected with mental diseases, and to make known truths, of useful application in the treatment and regimen, of that unfortunate class, to whom I have devoted my life.

MENTAL DISEASES.

ESSAYS ON INSANITY AND ITS VARIETIES.

INSANITY.

GENERAL DESCRIPTION OF THE MENTAL CHARACTERISTICS OF THE INMATES OF AN INSTITUTION FOR THE INSANE.

Symptoms of Insanity.—Definition of term.—*(Farther definitions from eminent writers.)* —Illustrations.—Primitive type in some of the passions.—Vital forces often greatly exalted.—Physical and moral sensibility modified or changed.—Divisions of Insanity into lypemania, etc.—*(Remarks upon.)*

Causes of Insanity.—Climates, seasons, age, sex, temperament, professions, modes of living, laws, civilization, morals and political condition of a people.—Progress of Insanity. Traced in a general manner, succeeded by details respecting its terminations, etc.—Prognosis of Insanity.—Considered with reference to its divisions.—Treatment of Insanity.—Isolation, and treatment at home, compared and considered at length.—Effects of isolation upon the brain.—Moral therapeutics highly esteemed.—Principles of physical treatment.—Site suited to the insane.—Clothing, bedding, diet, drinks, corporeal exercises.—Medical treatment.—Use of water.—Evacuants, purgatives, emetics, blood-letting.—Tonics and sedatives.—General regimen.—Counter-irritants.—Electricity, galvanism, magnetism, Prophylactics.—(*Farther remarks on treatment.*)

What reflections engage the mind of the philosopher, who, turning aside from the tumult of the world, makes the circuit of a House for the insane! He finds there the same ideas, the same errors, the same passions, the same misfortunes, that elsewhere prevail. It is the same world; but its distinctive characters are more noticeable, its features more marked, its colors more vivid, its effects more striking, because man there displays himself in all his nakedness; dissimulating not his thoughts, nor concealing his defects; lending not to his passions seductive charms, nor to his vices deceitful appearances.

Every House for the insane has its gods, its priests, its faithful, its fanatics. It has its emperors, its kings, its ministers, its courtiers, its opulent, its generals, its soldiers, and a people who obey. One believes himself inspired of God, and in communication with the Holy Spirit. He is charged with the conversion of the world; whilst another, possessed of a demon, given over to all the torments of hell, groans, and is frantic with despair; cursing heaven, earth, and his own existence. Another, bold and audacious, commands the

universe, and makes war with the four quarters of the globe; which he has subjected to his laws, or delivered over to the chains of despotism. A third, proud of the name he has given himself, looks with disdain upon his companions in affliction; lives alone, retired, and preserves a seriousness, as affecting as it is vain. *This one*, in the pride of his heart, thinks himself to possess the science of Newton, and the eloquence of Bossuet; and requires the applauses of those about him to the productions of his genius, with a comic pretension and assurance. *That*, stirs not; nor makes the least movement; always in the same place, and in the same position, he utters not a word. We might take him for a statue. He lives within himself; his inaction is destroying him. Withered by remorse, his neighbor drags out the feeble remnant of a life, which he with difficulty sustains. Uttering reproaches, he curses himself, and invokes death, as terminating the evils that are preying upon him. Near him, is a man who, appearing happy and in the perfect enjoyment of his reason, calculates the moment of his dissolution with frightful indifference. He prepares with calmness, and even joy, the means of terminating his existence. This wretched man, both day and night, with eye and ear, watches for secret enemies. Darkness and light, sound and silence, motion and repose, all frighten and terrify him; he fears himself. How many imaginary terrors, consume the days and nights of this lypemaniac! Proceeding onward, we see one who, believing himself betrayed, persecuted and dishonored, has become agitated, exasperated, furious. Suspicion and hatred raise up enemies on every hand. In his unbridled vengeance, he spares no one. Another, the sport of a morbid sensibility, and an excited imagination, suffers from habitual anger. He breaks, rends, and destroys, whatever comes within his reach. He cries aloud, threatens, and strikes, alledging always a motive to justify the frightful disorder of his actions. He whom you see confined, is a fanatic, who vociferates, blasphemes, and condemns to the fires of hell. He pretends to convert men; and as it is by the baptism of blood that he would purify them, he has already sacrificed two of his children. This senseless being, amid the noisy ravings of his delirium, is of an incoercible petulance. He would injure no one, though ready, apparently, to commit the greatest disorders. To witness his eager activity, you would believe that some great subject engaged his attention, and that his destiny depended upon his movements. In his devious course, he shocks and offends every one that surrounds him, and overthrows whatever opposes his progress. He follows and assails you with his unintelligible babble; but notwithstanding this torrent of words, he says nothing, thinks nothing.

Another, quite at his ease, passes a happy life, laughing incessantly: yet who can excite his joy, and for what can he hope? He has no recollection of the day just past, nor any desire for the morrow.

Thus, in a House for the insane, one can hear at the same time, the shouts of gladness mingled with sentiments of sorrow; expressions of joy, in connection with the groans of despair. He may see contentment in some, and tears flowing from the eyes of others.

In these establishments, the social bonds are broken; habits are changed; friendships cease; confidence is destroyed. Their inmates do good without benevolence; injure without dislike, and obey through fear. Each has his own ideas, affections, and language. With no community of thoughts, each lives alone, and for himself. Egotism isolates all. Their language is extravagant, and disordered, like the thoughts and passions which it expresses. An asylum of this character is not exempt from crime. They denounce, calumniate, conspire. They give themselves up to brutish libertinism; ravish, rob, assassinate. The son curses his father, the mother strangles her children.

If we proceed farther, we see man, fallen from the high rank which places him at the head of creation, despoiled of his privileges, deprived of his most

noble character, and reduced to the condition of the most stupid and vilest creature. He thinks not. Not only is he destitute of ideas and passions, but has not even the determinations of instinct.

Unable to provide for his subsistence, he is also incapable of conveying to his lips the aliment that tenderness or benevolence provides. He rolls about amid his own ordure, and remains exposed to all external and destructive influences; rarely recognizing his fellow beings, and having no proper sentiment of his own existence. In this assemblage of enemies, who know only how to shun, or injure each other; what application, what devotion to duty, what zeal are necessary, to unfold the cause, and seat of so many disorders; to restore to reason its perverted powers; to control so many diverse passions, to conciliate so many opposing interests; in fine, to restore man to himself! We must correct and restrain one; animate and sustain another; attract the attention of a third, touch the feelings of a fourth. One may be controlled by fear, another by mildness; all by hope. For this untiring devotion, an approving conscience must be our chief reward. For what can a physician hope, who is always considered wrong when he does not succeed, who rarely secures confidence when successful; and who is followed by prejudices, even in the good which has been obtained.

For our guidance, in this chaos of human miseries, we will reduce to four principal divisions, what we have to say concerning insanity: 1st, we will analyze the symptoms which characterize this malady; 2d, seek for its causes; 3d, trace its progress, and mark out its different terminations; 4th, and finally, we will lay down the general principles of its treatment.

I. SYMPTOMS OF INSANITY.

Insanity, or mental alienation, is a cerebral affection, ordinarily chronic, and without fever; characterized by disorders of sensibility, understanding, intelligence, and will.

I say ordinarily, because insanity is sometimes of brief duration; and because at its commencement, and sometimes during its course, febrile symptoms are manifested.

[Few, if any systematic writers on the subject, have omitted to furnish a definition of the term "insanity."

After a lengthy, and able description of the faculties of the mind, in their healthy and disordered manifestations, Conolly has given us his definition in the following language: "Insanity is the impairment of any one or more of the faculties of the mind, accompanied with, or inducing a defect of the comparing faculties."

Pritchard, after a cursory notice of the sentiments of earlier writers on this point, describes insanity "as a chronic disease, manifested by deviations from the healthy and natural state of the mind, such deviations consisting either in a *moral perversion* or a disorder of the feelings, affections, and habits of the individual, or in *intellectual derangement*, which last is sometimes partial, namely in *monomania*, affecting the understanding only in particular modes of thought; or general, and accompanied with excitement, namely, in *mania*, or raving *madness;* or lastly, confounding or destroying the connections or associations of ideas, and producing a state of *incoherence*."

Doct. Brigham, superintendent of the New York State Lunatic Hospital, has recently given us the following: "Insanity is a chronic disease of the brain, producing either derangement of the intellectual faculties, or prolonged change of the feelings, affections and habits of an individual."

In general, it is regarded as a disorder of the system, by which the sound and healthy exercise of the mental faculties is impeded and disturbed.

That every case of mental derangement, from the first moment of its existence, can be perceived, and referred with accuracy and precision to one or another of these definitions, just as in science every fact may be referred back to its principle, is not, by those at all conversant with the subject, supposed to be in all, or perhaps in any case, possible.

Who can tell when health ends and disease begins? When disease is found to have shed its blighting influence over the system, is it possible, after establishing this fact, to decide what amount or kind is necessary to occasion aberration of mind, and when this amount and quality is developed? When developed, does it at once manifest its baleful influence upon the brain, by producing insanity; or does it not rather brood over the delicate organ of the mind, and gradually fulfill its dread commission? When again the mind begins to totter, and reason to sit insecurely upon her throne, do the friends and acquaintances of the unhappy sufferer recognize these first monitions? Or do they not rather behold,—if indeed they observe any thing,—a simple change of habit, slightly perverted moral feelings, or trifling eccentricities of character?

Now it is conceived to be quite possible, not to say probable, that even during this early stage of insanity, before the friends or immediate associates of the patient are aware of its existence, or before it becomes developed to a degree that brings it clearly within the limits of any of the above definitions, that a source of excitement—fear, apprehension, or mental disturbance of some sort—shall so operate upon the mind, through the medium of its diseased organ the brain, as to lead the person so afflicted, now to the commission of suicide; now to homicide, or other acts of a grossly immoral and highly criminal character.

Experience also justifies the belief, that these results may follow in the train of excitement occurring from ordinary intercourse with society; and equally, from the perverted thoughts and emotions of the individual—thoughts and emotions too, which he may never have expressed, or merely hinted at, in conversation with his friends.

If this be true, and we firmly believe it is, how extremely difficult may it be, to separate the acts, whether criminal or otherwise, of the man who feigns insanity, and him whom God has seen fit, in his providence to afflict?

How utterly inapplicable, and useless indeed in emergencies of this sort, are the most elaborate and subtle definitions of this term "insanity"! Time, and time alone, will enable us satisfactorily to distinguish between them.

No skill of the physician, no degree of experience however great, no penetration or reach of thought, will suffice at a glance to decide this momentous question.

Careful observation of the bodily health, and particularly those organic functions that are beyond the control of the will; and watchfulness by day and by night, to as great an extent as possible, of the mental operations and acts of the patient—and that without his knowledge or suspicion of the fact—will eventually and rightfully decide the case.

Such are a few of the general considerations, by which we are to be governed in our attempts to detect and decide upon the existence and form of insanity, from which a fellow being may suffer.

Yet, as if to baffle all our efforts, and to render nugatory the best concerted plans for its detection, a form is known to exist which is strictly intermittent in its character; the patient in the intervals, furnishing not the remotest evidence of insanity. Then again a progressive derangement may form a sort of crisis amid the horror and confusion of some dread outbreak, which shall compromise if not terminate the existence of a human being, and with it the insanity which led to the lamentable result. The crisis of a child's grief and pain often manifests itself in sobs and tears; of anger, in a brawl or fight; in a word, of any strong emotion, in a powerful and concentrated exercise of it.

Insanity, when it assumes this form, is to be studied successfully, only by a careful examination of all the facts and circumstances of the case, as they are unfolded previously to, and many times, long before the outbreak which renders it painfully evident, as well as during its manifest existence and subsequently.]

Among the insane, sensibility is exalted, or perverted; and their sensations are no longer in relation with external or internal impressions. They seem to be the sport of the errors of their senses, and of their illusions. Many insane persons do not read, because the letters appear to be mingled in a confused mass, so that they are unable to arrange them, in such a manner as to form syllables and words. A thousand illusions of sight, produce, and continue their delirium. They recognize neither their parents nor friends, and regard them either as strangers or enemies. They are no longer correct in the appreciation of the qualities and properties of surrounding objects; many believing themselves at their usual places of abode, when, indeed, they are very far removed from them, and reciprocally.

An officer of talent, of strong constitution, and about forty-six years of age, experiences some disappointments in the service. He becomes irritable, is remanded to Paris, and is not received as he had anticipated. His imagination becomes excited. After some days, he leaves his own residence at eleven o'clock in the evening, traverses the Place Louis XV., and finds not the Column, elevated in the Place Vendôme. He at once persuades himself that the insurgents have overturned it, and threaten the government. He stations himself upon the bridge Louis XVI. to defend the passage against the pretended insurgents. He arrests all who would pass. The guard appear. He contends desperately against these enemies of the State, is wounded, and yields only to numbers.

A lady aged twenty-seven years, in the last stage of phthisis, becomes exceedingly annoyed by the odor of burning charcoal. She believes that they wish to suffocate her; accuses the proprietor of the house, and hastens to denounce him to her friends. This odor follows her every where. Every where she is assailed by the fumes of charcoal. She quits her lodgings, changing them many times in a month. The principal disease continues to make progress, and the patient dies, tormented to the last by her hallucination.

Very often the insane repulse with horror, and obstinately refuse aliments after having smelled them for a considerable time. Frequently, at the commencement of insanity, the taste is perverted; and the alienated reject all kinds of nourishment. This symptom, alarming to those who have no experience among the insane, is dissipated with the inconvenience which causes it, viz., gastric irritation.

A student breakfasts with a friend, gets tipsy, becomes furious, and remains convinced that they have mingled drugs with his wine. (See *Illusions*).

How frequently do the insane deceive themselves with respect to the volume, form, and thickness, of those bodies which they touch! The greater part become unskillful in labors of the hands, in the mechanic arts, music and writing. They are very awkward, and the touch has lost its singular property of rectifying the errors of the other senses.

These errors of sensation appear to affect, sometimes but one sense, often two, more rarely three, sometimes four, and even all. When mental alienation manifests itself, and sometimes long before, both the senses of smell and taste are altered, but errors of hearing and sight, characterize, and continue more generally, the delirium of the greater part of the insane.*

There are insane persons who hear voices speaking very distinctly, and with which they hold successive conversations. *These voices* proceed from the clouds, and from trees; they penetrate walls and pavements; they pursue and fatigue, those who hear them, day and night; while walking, in society, amidst assemblies, as well as in retirement. They take the accent and tone of a relative, a friend, a neighbor, or an enemy. They make proposals, gay, erotic, threatening or injurious in their nature. They advise to actions, contrary to honor, to interest, or to the preservation of the patient. A gentle-

* See *Hallucinations and Illusions.*

man, after a dreadful catastrophe, thinks himself accused; attempts suicide, and passes more than two years, in listening to the threatening voices of his accusers.

Mrs. A. entertains the belief that men enter her chamber during the night. On being shown that this is impossible, she replies, they pass through the lock. A lypemaniac speaks aloud, when by himself, and as if in conversation with another person. I remarked upon its impropriety, assuring him that no person could hear, or reply to him. In the midst of our discussion, he says to me: *Do you not sometimes think? Doubtless, I replied. You think silently, he continued, but I aloud.* If insanity is characterized and maintained by errors of sensation, by illusions and hallucinations; it is also, by the multiplicity of sensations, by the abundance of ideas, the versatility of the affections, which are produced in melancholy confusion, without order, end, or coherence. This exuberance of thought, permits not the patient to arrest his attention sufficiently long upon each sensation or idea, to separate those which have no relation among themselves, or to remove those, which exist in excess. He can no longer seize upon the qualities or relations of things; neither compare, nor abstract. There results from this disposition a volatile delirium, whose object is unceasingly renewed, and takes every variety of form. Both the language and actions participate in this mobility, and give at times, a very elevated, and even sublime character, to the thoughts. Under other circumstances, the attention exercises itself with so much energy as to become fixed upon a single subject. Constantly confined to this, nothing can turn it aside. All reasonings and determinations, are derived from this all-absorbing idea. Monomania offers a thousand examples of this form of delirium.

The faculty which the mind possesses, of associating our sensations and ideas, of arranging them among themselves, of combining them with our determinations, presents very remarkable alterations among the insane. The slightest impression, or the most remote coincidence, provokes the strangest associations.

The city of *Die* is overlooked by a neighboring rock, which is called the *U.* A young man suggested to himself the propriety of adding the letter U to the word Die, making it the word *Dieu*, (God). Hence all the inhabitants of Die, became gods in his opinion. He immediately perceives the absurdity of this Polytheism, and concentrates the divinity in the person of his father, as the most reputable man of that country. His father, although at two hundred leagues distance acts in him, and he acts only by his father. A general becomes agitated, cries aloud, and takes the tone of a commander, the moment that he hears the drum or the cannon. Often the delirium allies itself so closely to the cause which has excited it, to the intellectual and moral condition of the patient at the period of the attack, that this vicious association, persists during the whole disease, characterizes it, and becomes the only obstacle to its cure. An emigrant soldier, thirty-five years of age, having returned to France, is arrested, put in prison, and loses his reason. Restored to liberty, he sees himself every where surrounded by spies, and agents of the police.

A young artist, a passionate admirer of Rousseau, not obtaining the first prize for sculpture, of which he thought himself deserving, gives himself up to despair. He vows eternal hatred to men, and wishes no longer to live, except after the manner of brutes. He walks upon all fours, and if placed upon a bed rolls himself off upon the ground. If confined, he has convulsions. He will eat nothing but herbs, or crude fruits which he picks up from the ground. If helped to them, he refuses to use them. This condition persists for more than two months, after which he falls into a state of dementia, to which he has a strong predisposition, having several brothers and sisters affected with this form of disease.

With another class of the insane, the enfeebled organs perceive but feebly, sensations; impressions are not sufficiently felt; memory retains them not, and is unfaithful. These persons remember only events long since passed. Imperfectly served by their sensations and memory, they cannot seize upon affinities. They can no longer arrest their attention, as it is not excited by the impression of external objects. Their determinations are uncertain. They seem to act only from recollections.

Memory presents also striking anomalies among the insane, the ideas either requiring an actual sensation to awaken them, or a continual effort to recall them. Memory is not wanting with these patients, but the faculty of directing and fixing their attention being impaired, memory serves them imperfectly.

In some cases of mental alienation, man, deprived, in some sort, of the control of the will, seems no longer to be master of his determinations. The insane, controlled by their predominant ideas and impressions, are drawn away to the performance of acts which they themselves disapprove. Some, condemning themselves to repose, to silence and inaction, cannot control the power which represses their activity. Others walk about, sing, dance, and write, without the power to refrain. We have seen some escape from their relatives with no other motive than the desire of moving about, hasten from point to point for many days, scarcely stopping to take nourishment; while others give themselves up to acts of madness, which cause them intense agony. These impulses, these irresistible propensities, these automatic determinations as authors call them, seem to be independent of the will. However, they result generally, from motives, of which the insane, and those conversant with them, can, to a certain extent, give an account.*

The insane are, as Locke remarks, like those who lay down false principles, from which they reason very justly, although their consequences are erroneous.

A public receiver, after long and difficult labor upon the finances, is stricken with mania. The attack terminates in melancholy complicated with dementia and paralysis. He refuses for some days to drink at his repasts. They insist—he becomes enraged; exclaiming, *rascal, would you have me swallow my brother!* Reflecting upon this strange notion, I perceive that the patient sees his own image in the bottle placed upon the table. I remove it, and from thenceforth he drinks without difficulty. A vine-dresser slays his children, says Pinel, but he does it that they may not be damned. A woman forty years of age, having fallen into the most abject misery, throws herself into the river. She assured me that during twenty-four hours, while walking upon its banks, she had suffered indescribably, and had resolved upon suicide, only to prevent the anguish of the most profound misery.

The moral affections provoke insanity. The symptoms which characterize it, impress often, every feature of the passions. The determinations which the passions produce, are not in harmony with those by which the patient was formerly affected, nor with what are observed among other individuals.

A madman is passionate, jealous; he commits murder. He is impatient of restraint; and if he cannot otherwise escape, will precipitate himself from the house in which he is confined, or set fire to it. Among the insane, some are stricken with terror, believe themselves ruined, tremble lest they shall become the victims of a conspiracy, fear death. Others are happy and gay; think only of the good which they enjoy, or of the benefits which they can dispense. They feel persuaded that they are elevated to the greatest dignity, —that the homage of the world is their due,—that they inhabit a superior re-

* See *Homicidal Monomania.*

gion, where they are eternally to dwell, intoxicated with delight. Witness, for example, the madman of Athens, who believed that all the vessels entering the Pyræus were his own.

A young chemist, aged twenty-seven years, and of a strong constitution, labors night and day in researches appropriate to his department. He becomes greatly excited, and is at the same time amorous. He precipitates himself from the fourth story of the house, and fractures the fibula. Replaced in bed, the delirium continues intense. The patient distributes millions, and promises that all the world shall be happy. At the expiration of three months he is restored.

The first sentence which he wrote his parents is thus expressed: '*I feel that I must renounce my illusions. Never shall I be so happy as during the three months which have just passed.*' This happy state of some deranged persons, has been the cause of many errors respecting this class of people. Some who see them thus, conclude that the insane are all happy, that they do not suffer; whilst, generally, they suffer as much physically as morally.

The passions of the insane are impetuous, especially in mania and monomania. They are of a depressing character in lypemania. In dementia and imbecility, those only exist, which spring from the first wants of man,—love, anger, jealousy.

He who should say that rage is but an attack of anger prolonged, might also say, that erotomania is love carried to excess,—that religious lypemania is zeal or religious fear carried beyond due limits,—that suicide is an attack of despair. Thus, from a condition the most calm, one becomes excited, by insensible gradations, to the most violent passion, and even to the most furious mania, or sinks into the profoundest melancholy,—almost all forms of insanity, having their primitive type in some of the passions.

The insane sometimes surrender themselves to the most disgraceful acts.

Here is one of strict integrity, of irreproachable morals, connected even with the highest class in society; but who, becoming insane, makes infamous proposals, indulges in indecent gestures, and is the opposite, in every respect, to what his past conduct would lead us to expect.

There are, in fine, those who rob.

M. ***, forty years of age, after the storms of the revolution had passed away, returns to France and obtains an honorable subsistence. Two years subsequently, he suffers from loss of memory, and his friends perceive a change in his character. At length, while dining with one of them, he carries off certain pieces of silver plate. On arriving at Paris, he betakes himself to the café de Foy, orders a cup of chocolate, breakfasts, and leaves without paying, carrying off in his waistcoat, a spoon and saucer. It is unnecessary to relate here, the excesses which the hysterical and nymphomaniacs commit.

The insane become pusillanimous in the extreme. They permit themselves to be easily intimidated. They are fearful, diffident, jealous. It is this which occasions their restlessness, which makes them anxious to be any where, rather than where they happen to be,—to distrust themselves, and to withdraw from their parents and friends. This feeling of distrust, is found among people of little intelligence. Men the least suspicious, and the most confident, are, beyond contradiction, those who cultivate their minds; so true is it, that moral force is in proportion to mental development. But notwithstanding this distrust, the insane are improvident, to a degree which can be compared only with that of savages. They have no care for the moment which has just past, but are extremely anxious for the present. This improvidence exposes them to privations of every kind, if a careful watch is not exercised over them, and their wants carefully supplied.

The insane often entertain an aversion towards persons who were previous-

ly dear to them. They insult, misuse, and fly from them. It is a result, however, of their distrust, jealousy and fear. Opposed to all, they fear all. Some, appear to constitute an exception to this general law, and seem to preserve a sort of affection for their relatives and friends. But this tenderness, which is sometimes excessive, exists without confidence, and without intimacy with those persons, who, before their illness, directed the ideas, and actions of the patient. This melancholic person adores his wife, but is deaf to her advice and prayers. This son would sacrifice his life for his father; but would do nothing through deference to his counsels, from the moment they have his delirium for their object.

This moral alienation is so constant, that it would appear to me to be an essential characteristic of mental alienation.

There are insane persons whose *delirium* is scarcely noticeable; none whose passions and moral affections, are not disordered, perverted, or annihilated. The return of the moral affections within their just bounds, the wish to see his children and friends once more, the tears of sensibility, the desire of unfolding the affections, of finding himself again in the midst of his family, and of returning to his accustomed habits, are certain signs of a cure; while the contrary had been a sign of approaching insanity, or the index of a threatening relapse.

The diminution of delirium is a certain sign of returning health, only when the insane return to their first affections.

Closing this long summary of the intellectual and moral symptoms of insanity, let us pass to the principal physical alterations, which the insane present.

The vital forces acquire, among this class of persons, an exaltation which permits them to resist influences, most calculated to affect the health; but this exaltation is not so general as is commonly believed.

Examples are rare, though repeated on all sides. Some insane persons experience an internal heat, so intense, that they throw themselves into water, and even amid ice, or refuse all clothing at the coldest season of the year.

With others the muscular system acquires an energy, the more formidable, as force is joined to audacity, and their delirium renders them indifferent to danger.

We have seen madmen pass many days without food or drink, and preserve all their muscular energy. I repeat it, these examples are rare. Almost all the insane crowd around the fire when there is occasion for its use, and almost all eat much, and very frequently.

Scrofula affects so many of the insane in every hospital, because their habitations are damp, cold, and imperfectly ventilated; and because this class of patients live in idleness and inactivity. Epidemics and contagions spare them not, which proves that they are not so insusceptible to external influences as is pretended.

The features of the insane are convulsed, and their physiognomy wears the impress of pain. How different the changeful features of the maniac; the fixed and lengthened visage of the melancholic; the relaxed features, and extinct expression of one in dementia, from those of the same individuals after restoration to health!

Among the insane, some are plethoric, others lymphatic; some are strong, others feeble; the pulse is full, voluminous and hard among the former; with the latter, slow, soft, and concentrated. Tormented with hunger and thirst, they are more agitated or melancholic after, than before their repasts. Some have acid nidorous eructations; some debility of the stomach, which induces them to drink wine and liquors; while others suffer from abdominal pains, and heat of the intestines.

Maniacs, monomaniacs and lypemaniacs, do not sleep; insomnia conti-

nuing for several months. If they sleep, they have the nightmare, frightful dreams, and are awoke by surprise, while imbeciles and those in dementia would like to sleep constantly.

There are those, who are troubled with a constipation, which persists for eight, thirteen and twenty-one days,—those whose urine is retained for twenty-four, sixty, and one hundred and twenty hours. With others, the alvine dejections and urine, pass off involuntarily.

All the secretions acquire a penetrating odor, impregnating both the clothing and furniture, and which nothing can remove.

Many insane persons suffer from violent pains in the head, which cause them to beat it; also from pains in the chest, abdomen and limbs, which they attribute often, to their enemies, to the devil, or to harsh treatment. In fine, they are subject to cutaneous affections, sores, hemorrhoids, convulsions, organic diseases, etc.

From all that precedes we conclude, that among the insane the vital properties are changed; that physical and moral sensibility; the faculty of perceiving, comparing and associating ideas; the memory and will; the moral affections, and the functions of organic life; are all more or less impaired.

As I have interdicted myself from all explanation, I must content myself with saying, behold the facts. However, I will add a few brief observations, which will aid, perhaps, in shedding some light on the subject of delirium.

A young man sees around him all the persons composing the court. He prostrates himself before the feet of him, whom he believes to be the sovereign, and refuses the attentions they are about to render him; unwilling to be served by such august personages. He becomes furious, when the servants treat with familiarity the sovereign of his creation. I cause his eyes to be bandaged for two days, and his delirium ceases; but on removing the covering, it again returns.

Reil states that a lady, seeing spectres and monsters about her, fell into a convulsive delirium; and that her chambermaid, in order to protect her, placed her hand over the eyes of the patient, who immediately exclaimed; *I am cured.* This experiment was renewed with the same success, before the physician.

The insane, when restored, preserve the most perfect recollection of their sensations, whether true or false. They recall without difficulty their reasonings, and the determinations resulting from them, and the recollection even, of the smallest details, acquire distinctness, as they advance towards the enjoyment of perfect health. Hence during delirium, they possess the knowledge and capacity requisite for reasoning.

As to lesions of the understanding, they can be reduced to that of the attention; Jean Jacques has said, "*The state of reflection, is a state, contrary to nature. Man who meditates is a depraved animal.*" Instead of this misanthropic freak of thought, Rousseau should have said, that all reasoning supposes an effort, and that we are not naturally reasoning beings; that is to say, our ideas are not conformed to objects, our comparisons exact, our reasonings just, but by a succession of efforts of the attention; which supposes in its turn, an active state of the organ of thought; just as a muscular effort is necessary to produce motion, although the movement may no more exist in the muscle, than thought in the brain.

If we reflect upon what passes through the mind of even the most sensible man for a single day, what incoherence shall we notice in his ideas and determinations, from the time that he awakes in the morning, until he retires to rest at night! His sensations, ideas and determinations, have some connection among themselves, only when he arrests his attention; and then only does he reason. The insane, no longer enjoy the faculty of fixing, and directing their attention, and this privation is the primitive cause of all their errors.

We observe this among children, who, although very impressible, have nevertheless few sensations, for want of attention. The same thing happens to the aged, because their attention is no longer solicited by external objects, in consequence of the feebleness of organs.

The impressions are so fugitive and numerous, the ideas so abundant, that the maniac cannot fix his attention sufficiently upon each object and idea. With the monomaniac, the attention is so concentrated, that it cannot turn itself aside upon surrounding objects, and accessory ideas. Hence these madmen feel, but do not think. Among those in a state of dementia or the contrary, the organs are too much enfeebled to sustain the attention, and there are no longer sensations or understanding.

The attention of all the insane is so essentially disturbed by one of these three causes, that if sensation, strong, agreeable, painful or unexpected, fixes the attention of the maniac, or turns aside that of the monomaniac; if a violent commotion arouses the attention of him who is in a state of dementia; he immediately becomes rational, and this return of reason, lasts as long as the effect of the sensation; that is, whilst the patient retains the power of directing and sustaining his attention.

Imbeciles and idiots are deprived of this faculty, and hence are incapable of education. I have very often repeated this experiment among them. Having taken casts of a great many insane people, I have succeeded in placing in a suitable attitude, maniacs, the furious even, and the melancholic; but could never cause the imbeciles to close their eyes sufficiently long for the plaster to flow, whatever degree of good will they might bring to the undertaking. I have even seen them weep, because the casting of their heads had not succeeded, and undertake many times, but unsuccessfully, to preserve the posture that had been given them. They were unable, also, to close their eyes longer than one or two minutes.

Will the pathological study of the faculties of the soul, conduct to the same results with those to which M. Laromiguière has arrived, in his eloquent discourses on philosophy?

Numerous facts will justify this psychological view, upon which reposes a principle, fruitful, with respect to the cure of mental diseases.

After having reduced insanity in some sort to its elements; after having isolated them; to obtain the general forms of insanity, we have only to reunite these elements. Now these general forms are embraced in the terms following, and constitute five varieties.

1. Lypemania (melancholy of the ancients), delirium with respect to one, or a small number of objects, with predominance of a sorrowful and depressing passion.

2. Monomania, in which the delirium is limited to one or a small number of objects, with excitement, and predominance of a gay, and expansive passion.

3. Mania, in which the delirium extends to all kinds of objects, and is accompanied by excitement.

4. Dementia, in which the insensate utter folly, because the organs of thought have lost their energy, and the strength requisite to fulfill their functions.

5. Imbecility, or idiocy, in which the conformation of the organs has never been such, that those who are thus afflicted, could reason justly.

[The forms of insanity here given by our author, and which have so long been received and admitted by those concerned in the management of the insane, are destined at no distant day to undergo a decided modification, if not a radical change.

In its relations to insanity, the mind is regarded as susceptible of two principal divisions; namely, into an intellectual and moral portion.

Each of these have their peculiar province, the one presiding over all operations purely mental, the other over those involving only the feelings and emotions.

They may, under the influence of appropriate causes, each become deranged in their manifestations, and give rise to a form of insanity which shall involve the intellect or moral nature exclusively.

A third form may result from a derangement of both of these in the same individual; and thus in three divisions may be embraced all those forms of insanity of which the mind is susceptible.

As sub-divisions however, among writers on insanity, as well as in common parlance, the terms lypemania or melancholy, mania or madness, and dementia, will doubtless continue to be employed as qualifying or explanatory words in the more general descriptions above referred to, and with their present significations. So also in relation to monomania, when the mental aberration is limited to a few subjects.

Notwithstanding, the intellectual, moral and mixed will, at no distant day, become the leading divisions of this important subject.]

These forms, sufficiently well distinguished in the engravings appended to these memoirs, in which are described the varieties of insanity, have served as the basis of classification with Pinel; and express the generic characters of mental alienation. Being common to many mental affections, whose origin, nature, treatment and termination, are widely different, they cannot characterize the species and varieties which are reproduced with infinite shades of difference.

Insanity may assume successively, all these forms; monomania, mania, and dementia, may alternate and replace each other, and become complicated in the course of the same disorder, and in the person of the same individual.

It is this circumstance, that has caused some physicians to reject all distinctions, and to admit, in insanity, but one and the same malady, which masks itself under various forms. I do not concur with them in this opinion, and regard the varieties of which I have just spoken, as too distinct ever to be confounded.

We could wish to establish the numerical relation which subsists between the different forms of insanity. Some authors believe that melancholy is the most frequent. Pinel would seem to be of this opinion. However, in the second edition of his "*Treatise on Insanity*," he makes six hundred and four maniacs, and only two hundred and ten melancholics or monomaniacs.

To compare the returns which have been made in different places, and by different authors, it would be necessary that each should give the same signification to the terms, *dementia*, *idiocy*, *mania* and *melancholy;* a fact which does not exist.

According to the foregoing definition of these varieties, I think that monomania is more frequent than mania. Dementia and idiocy are more rare, particularly the latter, which is endemic in certain mountainous districts.

II. CAUSES OF INSANITY.

The causes of mental alienation are as numerous, as its forms are varied. They are general or special, physical or moral, primitive or secondary, predisposing or exciting.

Not only do climates, seasons, age, sex, temperament, profession and mode of life, have an influence upon the frequency, character, duration, crises, and treatment of insanity; but this malady is still modified by laws, civilization, morals, and the political condition of people. It is, also, produced by causes, whose influence is more immediate, and easily appreciated.

1. *Climates.*—Warm climates are not those which produce the greatest amount of insanity; but rather temperate climates, subject to great atmospheric vicissitudes; and especially those, whose temperature is alternately cold and humid, damp and warm. We see less of insanity in the Indies, in America, Turkey and Greece; more of it, in the temperate climates of the north.

We have greatly exaggerated the influence of climate, in the production of insanity. Montesquieu believes, that the foggy atmosphere of England is the principal cause of the great number of suicides, of which the English speak with a kind of ostentation. We shall see farther on, that it is the most powerful and immediate cause of the great amount of insanity, which we notice among our neighbors. It seems to be endemic in some countries. In marshy districts, dementia is more frequent, and imbecility multiplies there.

Cretinism is endemic in the defiles of mountains. Mountaineers who descend into our cities, are more exposed to nostalgia, than the inhabitants of the plains.

The causes of insanity are not the same in a mountainous country, and on the sea-coast—in an agricultural district, and one which enriches itself by commerce.

2. *Seasons.*—After Hippocrates, Areteus and Celsus assure us, that summer and autumn produce rage. Most authors state that melancholy is particularly severe in autumn.

Dementia appears in winter.

Charles VI. became insane after having been exposed to the sun at the chase, or while engaged in exercises preparatory to war. Were not the inhabitants of Abderas stricken with insanity, in consequence of remaining too long exposed to the sun, while witnessing the *Andromeda* of Euripides?

Dodart saw a young man who lost his senses whenever he became heated.

The author of the Topography of Auvergne remarks, that its inhabitants who go into the southern provinces of Spain, return from thence melancholics or maniacs. Many Frenchmen, before our soldiers were acclimated in Spain, became insane.

Excess of cold causes the same disorders; a truth illustrated in the experience of our troops during their disastrous retreat from Russia, when many French soldiers were seized with phrenetic delirium, and even mania.

Doctor Pienitz, physician of the hospital for the insensate, at Pirna, near Dresden, received many French officers who were insane. Their mania was acute and passed promptly into a chronic state.

Heat, like cold, acts upon the insane, with this difference, that the continuance of warmth augments the excitement, while cold prolongs the depression. Great atmospheric commotions, excite and exasperate the insane. A house for the insane is most disturbed, and requires the most careful supervision, at the period of the equinoxes. The influence of certain winds upon the inhabitants of India, the Neapolitans, and Spaniards, explains sufficiently the effect of certain atmospheric states upon the insane.

From the following report, kept at the Salpêtrière for nine years, we learn; 1. that the admissions into this hospital, are most numerous during the months of May, June, July, and August. 2. that this proportion decreases from September to December, to diminish still more in February and March.

TABLE OF SEASONS. No. I.

Months.	Years.									Totals.
	1806	1807	1808	1809	1810	1811	1812	1813	1814	
January	18	19	18	13	15	13	22	26	18	162
February ...	23	23	27	26	13	13	15	19	14	173
March	27	27	16	18	22	17	17	27	16	187
April	32	24	15	27	19	13	28	20	18	196
May.....	26	27	23	26	34	30	29	31	17	243
June	32	28	33	31	22	18	32	26	29	251
July.....	23	37	21	39	34	24	37	21	29	265
August.....	20	23	25	32	21	19	29	25	45	239
September ..	21	24	21	25	16	25	23	26	25	206
October	23	24	16	17	18	18	23	23	26	188
November ..	23	21	23	27	28	16	16	19	25	198
December ..	24	19	14	18	18	23	20	25	30	191
Totals	292	296	252	299	260	229	291	288	292	2499

The influence of the seasons extends even to the course of the insanity. There are individuals who pass the summer in a state of prostration or agitation; whilst in the winter they are in an opposite condition.

Delirium changes its character with the seasons.

A lady, twenty-six years of age, after an attack of variola, has an abscess form in the arm-pit. It is opened, the wound cicatrizes, and insanity bursts forth. After two years the same patient is committed to my care. Her husband, at each succeeding change of season, announces the form of delirium about to occur, and this has been repeated, with great exactness, for several years.

Insanity, which appears in spring and summer, has an acute course. If not speedily cured, it terminates during the winter. The monomania and mania of autumn, terminate only in the spring. Summer is more favorable to the cure of dementia.

The cures which take place during the warm season are more rare, but more lasting.

Relapses are most likely to recur, at the season of the year corresponding with the first attack. They are most frequent in spring and summer, although they may occur in winter.

Relapses, although after an interval of many years, recur at the same season, with perfect regularity, in certain cases of intermittent insanity.

Does the moon exercise any influence upon the insane? The Germans and Italians, believe it does. The English, and almost all the moderns, give to the insane, the name of lunatics. Daquin of Chamberi,* after some observations, concludes that the moon exercises an influence over this class of maladies. Certain isolated facts, and phenomena observed in many nervous diseases would seem to justify this opinion.

I have been unable to verify this influence, though I have been at some pains to assure myself of it. It is true, that the insane are more agitated at the full of the moon, as they are also, at early dawn. But is it not the light of the moon that excites them, as that of day, in the morning?

Does not this brightness produce, in their habitations, an effect of light, which frightens one, rejoices another, and agitates all?

I am convinced of this last effect, from causing the windows of certain in-

* *The Philosophy of Insanity*; Chamberi, 1804, in 8 vo.

sane persons, who had been committed to my charge, as lunatics, to be carefully closed.

Doctor Hutchinson never perceived this influence during several years, whilst connected with the Pennsylvania Hospital, in the capacity of Assistant physician.

Haslam has not been more fortunate at the Bedlam of London.

At the Hospital Salpêtrière, where practical truths have become, in some sort known, among the inmates of the house, they have no longer any suspicions of lunar influence. The same is true of the Bicêtre, and certain private houses of the capital.

Nevertheless, an opinion which has existed for ages, which is spread abroad through all lands, and which is consecrated by finding a place in the vocabulary of every tongue, demands the most careful attention of observers.*

Many authors assure us that mental alienation is epidemic. It is certain that there are years, when, independently of moral causes, insanity seems suddenly to extend to a great number of individuals. As for moral contagions, they are incontestable. We shall speak of them hereafter.

3. *Age.*—Infancy is secure from insanity, unless at birth, the child suffers from some vice of conformation or convulsions, which occasion imbecility or idiocy. However, Joseph Franck, found in 1802, at St. Luke's, London, a child, who had been a maniac from the age of two years.

In 1814, I took charge of a child, aged eight years, of an agreeable figure, and endowed with the usual share of intellect, who had been very much frightened by its governess, at the siege of Paris. This child spoke often correctly, yet nothing could restrain him. He escaped frequently from his mother and governess, and wandered about the city. He was accustomed to descend into the court of the hotel, and to order the horses, pretending to be master. It was confidently affirmed, that he had gained a great sum, in a lottery. Does he visit the shop of a tradesman, or pass by a warehouse, he seizes upon the money that his mother or customers give, in payment for their purchases. He would often insult, provoke, or strike persons whom he met, especially those who were accustomed to visit his mother. He slept as soon as he sat down, and threw every thing into disorder as soon as he rose up, making a great deal of noise. He abused his mother, and was unwilling to do any thing that she desired.

A child, nine years of age, having recovered from an ataxic fever, became a maniac. He was perverse, insulted his father and sisters, struck every one he met, often wept, was unwilling to eat, did not sleep, and was noisy. He was much emaciated, and affected with a relaxed state of the bowels.

He was committed to my care, August 13th, 1814, about the eighth day of his new disorder. We permitted him to give a loose rein to all his desires, and indulged him in the open air during the whole day; prescribed for him quinine, together with a tonic regimen, and in two months he was restored.

In December, 1815, I was consulted in behalf of a child, endowed with precocious intelligence, aged eleven years, having a voluminous head, and very devoted to study.

He was melancholic, with hallucinations of taste and vision, and had fallen

* MM. Leuret and Mitivié, have examined the subject, with a view to ascertain whether the moon influences the pulse of the insane; and they decide in the negative. See their work, entitled, "*Frequency of the pulse among the insane,*" etc. in 8 vo. Paris, 1832: with engravings, representing the phases of the moon, and the number of the pulsations of the Insane, taken daily, during a month of summer, and one of winter, at the Salpêtrière, and at Ivry.

into marasmus. He often refused to eat, wishing for no aliment, from the time that he saw, or thought he saw the smoke of it.

He had assumed a tone of command and authority over his parents.

Isolation produced the effect of diminishing his repugnance to aliments, without changing his delirium.

These examples, which are not altogether exceptions, if joined to those which are caused by the jealousy of childhood, and by masturbation from very early life, are notwithstanding very rare.

It is only at puberty, during the earliest menstrual efforts, or during, and after a too rapid growth, that we begin to notice certain cases of mental alienation. But after puberty, we see much of erotic, hysterical and religious insanity.

In youth, mania and monomania, burst forth in all their varieties and forms.

Lypemania is rather the lot of adult age; while dementia attacks those more advanced in years, and such as have reached the evening of life. In youth, insanity has a more acute course, and is terminated by more distinct crises. In adult age, it is more chronic, and is more frequently complicated with abdominal affections, cerebral hemorrhages, and paralysis. It runs its course more slowly, and terminates by hemorrhoids, and alvine dejections. Its cure, also, is more uncertain.

It is dementia only, that is not sometimes observed among the young, and only mania and melancholy, that do not appear in advanced life. Greding, Rush, etc., have seen aged maniacs, of eighty-five years.*

We have had at the Salpêtrière, two women, aged, the one eighty, and the other eighty-one years, affected with maniacal fury. They were cured. I have attended upon a man seventy-eight years of age, who had melancholy complicated with mania. These persons had, however, preserved the vigor of consistent age.

Mental alienation might therefore be divided, relative to ages, into imbecility for childhood, mania and monomania for youth, lypemania or melancholy for consistent age, and into dementia for advanced life.

We have only to repeat with Haslam, that among sixteen hundred and sixty-four insane persons admitted into Bedlam hospital, from 1784 to 1794, nine hundred and ten were from twenty to fifty years of age. Rush is not more exact, when he says, that of seventy insane persons who were in the Pennsylvania hospital in 1812, sixty-four were between twenty and fifty years of age.

It is not surprising, that in a period of thirty years, and at a time of life too, when man is most exposed to every variety of disease, there should be the greatest proportion of insane persons. We will remark, however, that the number of the insane, between the ages of twenty and fifty years, is much more considerable, proportionally, in Pennsylvania than in London.

Can there be in England, more idiots, and individuals in a state of dementia, than in Pennsylvania? Hereditary predisposition, which so often leads to insanity in England, and morals, which exercise so great an influence in the production of this disease, furnish sufficient grounds for the difference which is known to exist.

* There is now at the Retreat for the Insane at Hartford a maniac eighty-one years of age. She was recently admitted.

TABLE OF AGES. No. II.

Years.	*Report kept at the Bicêtre for ten years.* Ages. 15	20	30	40	50	60	Total.
1784	5	33	31	24	11	6	110
1785	4	29	49	25	14	3	124
1786	4	31	40	32	15	5	127
1787	12	39	41	26	17	7	142
1788	9	43	53	21	18	7	151
1789	6	38	39	33	14	2	132
1790	6	28	34	19	9	7	103
1791	9	26	32	16	7	3	93
1792	6	26	33	18	12	3	98
1793	4	36	28	22	13	10	103
Totals,	65	329	380	236	130	53	1193

Years.	*Report kept at the Salpêtrière for four years.* Ages. 20	25	30	35	40	50	60	70	80	Total.
1811	34	37	38	27	48	38	24	12	4	262
1812	52	34	33	18	38	57	26	19	3	280
1813	43	29	33	41	32	57	31	13	6	285
1814	42	35	38	31	26	53	34	22	10	291
Totals,	171	135	142	117	144	205	115	66	23	1118

Report of my own Establishment.									
86	64	43	35	30	46	15	5	3	327

To determine what period of life furnishes the greatest number of insane persons, it was sufficient to bring together the records, made up under very different circumstances. One of them was made at the Bicêtre, where poor men only, are received; another at the Salpêtrière, a hospital destined for poor women. The last related to an establishment devoted to the wealthy. From these reports we may conclude: 1st, that the age which furnishes the greatest number of insane, is for men, that, from thirty to forty years; whilst for women, it is that, from fifty to sixty years; 2d, that the ages which furnish the least, are for both sexes, childhood, youth, and advanced age; 3d, that among women, insanity appears earlier than among men indeed from twenty-nine to thirty years of age; 4th, that the rich are affected, in comparison with the total number of insane persons, in a greater proportion than the poor.*

4. *Sex.*—Cœlius Aurelianus assures us, that women are less subject to insanity than men; and what was true in his time is still so in Italy and Greece. In the north of France the contrary is true; the number of insane women

* To determine the influence of age in the production of insanity, it is necessary to compare the number of insane persons at each period of life, with the whole number of people living, at those periods respectively.

being, in that region, greater than that of men. In England, the number of insane men bears a more equal proportion to that of women. We find the reason for this difference, in the comparison of their habits.

The vices of education adopted by our young ladies, the preference given to acquirements purely ornamental, the reading of romances, which gives to the intellect a precocious activity and premature desires, together with ideas of an imaginary excellence that can never be realized; the frequenting of plays and society; the abuse of music, and want of occupation; are causes sufficient to render insanity most frequent among our women.

In England, women receive a more substantial education; they lead a more retired life, and do not take so important a part in public affairs. The social existence of men does not depend so much upon their acts or caprices, and hence there are less insane women than in France.

From 1745 to 1775, Raymond found no difference in numbers, between the two sexes, among the insane at the hospital of Marseilles.*

In 1786, Tenon found, that the number of insane men and women, in the public and private establishments of Paris, were nearly equal.†

In 1791, the Duke de Larochefoncault Liancourt, in the excellent reports which he made to the constituent assembly, respecting the public charities, showed that a very great difference existed, between the number of men and women at the Bicêtre and Salpêtrière.

In 1802, Pinel established the difference to be as that of one man, to two women, in comparing the Bicêtre with the Salpêtrière.

In 1804, an examination at the establishment at Charenton, indicated that the men, numbered more than half of the inmates of the House.

The men are always more numerous here, than women; a fact depending upon localities, and peculiar circumstances.

In 1807 and 1810, while taking a hasty survey of the hospitals of the principal cities of France, I found about 6000 insane persons; in the proportion of five men to seven women.

In 1813, the prefect of the department of the Seine ordered an enumeration of all the insane, then in the public and private Houses of Paris. He found the number of females, to be the greater by one quarter.

In my establishment there were received, during twelve years, one hundred ninety-one men, and one hundred forty-four women.

From 1744 to 1794, in the hospital of Bedlam among nine thousand eight hundred and seventy-four deranged persons, the women numbered but one hundred more than the men.

The director of St. Luke's Hospital, London, being interrogated by a Committee of the House of Commons, reported that they received annually into that hospital, about one third more women than men.

At the Retreat near York, they admitted during ten years, a quarter more women than men.

At the Hospital for the insensate at Vienna, there were, in 1811, one hundred seventeen men, and ninety-four women.

At the Hospital at Berlin the proportion of men to women is as one to two.

At the Pennsylvania Hospital, the proportion is reversed; that is, one female to two males.

* Topography of Marseilles in the Memoirs of the Royal Society of Medicine, years 1777, 1778; Paris, 1780, tom. II. fig. 124.

† Memoirs respecting the Hospitals of Paris. Paris, 1788, in 4to. p. 218.

TABLE OF THE SEX. No. III.

1756.—Raymond at Marseilles,	50	men to	49	women.
1786.—Tenon at Paris,	500	"	509	"
1786 to 1794.—At Bedlam,	4992	"	4882	"
1807.—At St. Luke's,	110	"	153	"
Bicêtre and Salpêtrière, (mean year),	120	"	279	"
Vienna,	117	"	94	"
At the Retreat near York,	67	"	82	"
1807 to 1812.—Several Hospitals of France,	488	"	700	"
1802 to 1814.—My Establishment,	191	"	144	"
Total,	6635		6892	

In bringing together these different records, casting them up, and comparing them, we may conclude, without pretending to have arrived at a rigorous appreciation of the influence of sex,—

1. That in a very considerable number of insane people, selected from different countries, and in different conditions, the disparity in numbers between men and women, is much less considerable than is usually supposed:

2. That this difference approaches very nearly, the proportion which exists between the two sexes, in the general condition of the population:

3. That this difference is not the same in all countries:

4. That in France the proportion of women is much greater than in England.

As to the reports of other countries, they are based upon too small a number of cases, and extend over too brief a period of time, to enable us to form conclusions on which we can rely, either with respect to those countries themselves, or relatively, to France and England.

Let us not imagine that this question is one of little moment. It ought to awaken grave reflections respecting public morals, and the influence which women exercise over them. Its solution ought to furnish one of the preliminary data, in the construction of every hospital for the insane.

Women yield to the causes of insanity, proper to their sex; physical causes act more frequently upon them than men; they become more frequently insane before the age of twenty years; are more subject to dementia; and their delirium is religious or erotic.* Almost all their insanity is complicated with hysteria.

Women practice during their disorder, more concealment than men, they speak with more repugnance of their condition, and try to hide it from themselves and others.

Men are, on the contrary, more maniacal, more furious. They are more frank, more confident in their delirium, which is complicated often, with hypochondria. Their treatment is not interrupted, a greater proportionate number are cured, and they are less subject to relapses than women.

5. *Temperament.*—Simple temperaments are so rarely met with in practice, that it is not easy to point out with precision, that of this or that individual; and for a still stronger reason, that of one insane person or another.

The sanguine temperament, constitutes one of the predispositions to mania. The nervous temperament, characterized by a susceptibility which every thing

* Thomas' Essay on Women.

irritates and exasperates, in consequence of a susceptibility which deprives its possessor of the faculty of reasoning, is favorable to the production of mania and monomania. Individuals of a dry temperament, over whom the abdominal viscera exercise a controlling influence, who are fearful, timid and restless, are predisposed to lypemania.

The lymphatic temperament may be met with in connection with mania and monomania, but we ought then to fear dementia.

Imbeciles and idiots, offer no temperament, to which we can assign the character.

Among two hundred and sixty-five insane persons, Haslam found two hundred and five whose hair was dark, and sixty who had light hair.

In Pennsylvania, among seventy deranged persons, a single one had light hair, and fifty-six, blue or light eyes.

Chesnut colored hair and eyes, are most frequently met with at the Salpêtrière, because it is the general color of these parts in the north of France. More than one tenth of the insane admitted, have either gray or white hair, by reason of their advanced age. Blue eyes are found in great numbers, in comparison with black ones.

No. IV.

External aspects of the body, . . .	Moderate fullness, . .	122
	Lean, ...	60
	Fat, ...	6
Stature, ...	Tall, ...	102
	Short, ...	19
Eyes, ...	Chesnut color or brown,	102
	Blue or light color, . .	98
	Black, ...	17
Hair, ...	Chesnut color, . . .	118
	Flaxen, ...	39
	Gray or white, . . .	36
	Black, ...	31
	Dark flaxen, ...	2

In general, those who have black hair, who are strong, robust, and of a sanguine temperament, are maniacs, and furious. The course of their insanity is more acute, its crises more marked, than among those composing the other classes. Those whose hair is of a flaxen color, who have blue eyes, and a lymphatic temperament, become maniacs and monomaniacs; but their insanity passes readily into a chronic state, and degenerates into dementia. Those who have black hair and eyes, and who are of a dry, nervous temperament, are more frequently lypemaniacs. Those who have red hair, are furious, traitorous and dangerous.

6. *Profession, and mode of life.*—Persons who devote themselves very perseveringly to study, who abandon themselves to the vagaries of their imagination, who fatigue their intellect, either by a restless curiosity, or by turning aside in obedience to theories and hypotheses, or the allurements of speculative ideas, present a condition favorable to the development of mental alienation.

Some, possess an uncontrollable mental mobility; glance at every thing, but are incapable of thoroughly investigating any thing. Others, take an interest only in certain objects, and manifest an obstinate tenacity for the same meditations and conceptions.

These two classes, placed at opposite extremes, stand upon the confines of insanity, unless they constantly keep in check, those native dispositions.

Dryden has said that men of genius, and the insane, stand near together. If he meant by this, that men, who possess very active and disorderly imaginations, who have great exaltation and mobility of ideas, present striking analogies with the insane, he spoke correctly. But if he meant, that great intellectual capacity, occasions a predisposition to insanity, he is mistaken. Men of the greatest genius, both in the sciences and arts, the most illustrious poets, the most skillful painters, have preserved their reason, even to extreme old age. If we have seen painters, poets, musicians, and artists become insane, it is because they associate, with a very active imagination, great errors in regimen, to which their organization exposed them, more than other men. It is not because they exercise their minds, that they lose their reason; nor is it the culture of arts and letters, that we are to accuse. Men, who are endowed with great power of thought and imagination, have special need of sensations. The greater part of painters also, of poets and musicians, impelled by the need of emotions, abandon themselves to numerous errors of regimen; and it is these, far more than excessive study, which are the true cause of their insanity.

In other cases, the understanding takes an exclusive direction; and the man meditates without cessation, upon subjects connected with metaphysical speculations, and confines himself to them, with a determination proportionate to the efforts that are made to divert his mind. All his physical and moral faculties are absorbed. He neglects the most important personal attentions, condemning himself to practices which seriously affect his constitution.

Spasms of the epigastrium, are immediately followed by inertia of the nutritive system, the digestion becomes deranged, the secretions depraved, and transpiration is suppressed. Hence hypochondria and melancholy; so familiar to educated men of a meditative cast of mind, who grow pale from excessive study by night and day.

The danger is much greater, and far more imminent, if the attention concentrates itself upon religious ideas. When fanaticism is the cause of all these disorders, religious lypemania bursts forth with all its strangeness and excesses. It is what was witnessed among the gymnosophists, and what we at present observe among the brahmins, and faquirs; among the methodists in England, and the martinists in Germany.

I have seen many students who, animated by the desire of equaling or excelling their companions, after long continued study, became deranged. They were almost all masturbators.

I have had charge of certain officers and clerks, who became insane in consequence of exhausting vigils, or the monotonous labors of the office; and I ought to add, of pleasures. The same may be said of scholars, musicians and artists, in behalf of whom my advice has been sought. Thus excesses, and errors of regimen, ought to appear prominent, in the list of causes of mental alienation.

The prevailing sentiments of every age, exercise a powerful influence, over both the frequency and character of insanity. It would seem that certain minds, impressed with new conceptions, cannot divest themselves of them. The same effect, which reflection, too long continued, produces upon individuals, is produced upon an entire population. Thus, historical monuments prove, that at the birth of christianity, there was much religious melancholy.

The chivalrous spirit which succeeded the crusades, multiplied erotic melancholy. Civil and religious discords, excited by Calvinism, caused a return of religious melancholy. Magic and sorcery have had their turn. Ideas of liberty and reform have turned many heads in France, and it is remarkable, that those forms of insanity which have appeared within the last thirty years,

have been characterized by the political convulsions, that from time to time have visited our country.

Finally, it is not discoveries, nor is it a new institution, which always produces insanity.

One lady witnesses a phantasmagoria, and persuades herself that she is surrounded by phantoms. Another, sees the pretended invisible woman, and hence believes, that by some similar means, her lowest whispers may be heard at a distance.

A young man assists at certain experiments in physics, and thinks himself subjected to electrical action, which *causes his sufferings.*

A lady hears the subject of magnetism spoken of, and attributes her sleeplessness and unpleasant feelings, to magnetizers

The frequency of insanity, is always in relation with conditions in life, which render man more dependent upon social vicissitudes.

Hence, far from passing by the palaces of kings, mental alienation is more frequent there, than elsewhere.

Aristotle asks, why distinguished legislators are all melancholics. Courtiers, men eminent in society, and the rich, are more subject to this malady than the poor. Military men, the sport of capricious fortune, merchants, and above all reckless speculators, and clerks whose existence depends upon the will of their principals, all run the same hazards.

TABLE OF PROFESSIONS AND MODE OF LIFE. No. V.

Record of the Salpêtrière.		*Record of my Establishment.*	
Field laborers	43	Husbandmen	3
Domestics	51	Soldiers	33
Seamstresses	85	Mariners	3
Cooks	16	Merchants	50
Tradesmen (with fixed residences)	21	Students	25
Pedlers	16	Administrators and clerks	21
Shoemakers	8	Engineers	2
Varnishers	5	Lawyers, Notaries and business men	11
		Chemists, glass dealers	4
		Physicians	4
		Artists	8
Total	245	*Total*	164
Living in families	192		151
Public women	33	Misconduct	6
Abuse of wine	26		3
Masturbation	10		14
Change of condition	3		3
		Misanthropy	3
		Education (improperly directed)	20
Total	264	*Total*	200

In casting our eyes over this table, we see that a sedentary life, such as the wealthy lead in the bosom of their families, and the poor in their households and the exercise of their callings, is the most common condition of individuals who are affected with insanity. Some travelers assure us, that idleness is the cause of the greater part of the insanity which exists in Turkey. Sudden

change of state, and the transition from an active life, to one of repose, lead to insanity. This happens to merchants who, after having acquired an honorable fortune, retire from business. We observe the same fact, among the French soldiery, who, after a wandering, vagabond life, passed amidst the greatest privations on the one hand, and abundance on the other, obtain permission to retire. After the year 1815, I noticed the same circumstance also, in the case of several officers.

The desire for change of place, the mania for traveling, the uneasiness which some people experience, when they are without occupation, the breaking up of habits, leaving the heart and mind a void, in the midst of which, man is tossed without the power of being satisfied, predispose to mental alienation; whilst on the other hand, the abandonment of long formed habits, and the necessity for forming new ones, cause insanity, and often announce its immediate approach. Occupations, which expose man to the heat of the sun, and to the fumes of charcoal, favor the development of insanity.

Those who are obliged to work in the midst of metallic oxyds, cooks and miners, are liable to the same attacks.

The vapor of lead, produces in Scotland a species of insanity, in which the maniacs lacerate themselves at every opportunity, and which the Scotch peasants call, *mill-reeck*.

The miners of Peru and Mexico, are subject to a peculiar form of insanity.

It is pretended that dyers, who employ indigo, are sad and morose.

The habit of drunkenness, of indiscriminate gallantry, of disorderly conduct, or an apathetic indifference, are capable, says Pinel, of degrading the reason, and of bringing about, well marked mental alienation.

Masturbation, that scourge of human kind, is more frequently than is supposed, the cause of insanity, especially among the rich.

It would seem that this vice is more fatal to men than women. It is believed to be most rare among the latter. This is an error which is to be attributed to the fact, that women are more reserved with reference to it than men. If continence, in some very rare cases, has caused mental alienation, libertinism is a more frequent cause of it, especially among common women.

One twentieth of the alienated, admitted at the Salpêtrière have been prostitutes.*

These miserable beings, cut off from society, are in a state of utter abandonment. They know not upon what to support their wretchedness. After giving themselves up to every kind of excess, they generally sink into the most profound misery, and as a consequence, into dementia of a paralytic form.

We shall see besides, that the abuse of alcoholic liquors, and the amorous excesses of some individuals, are not always the cause, but sometimes the first symptoms of insanity.

The abuse of wine, liquors, and aromatic infusions of opium, produce a great amount of insanity. This cause ought to be regarded as producing half the cases of insanity that occur in England. In Pennsylvania, according to Rush, it is a very frequent cause. In France it is not rare, as any one may convince himself by observing the insane of the Bicêtre, and of Charenton.

In my own establishment, among three hundred and thirty patients, I have seen but three, who had given themselves up to the excessive use of wine, and liquors; and I believe that one of them used it to excess, only after becoming insane.

The abuse of wine and brandy, conduct either to suicide or dementia. Is not this the cause of so many suicides in England?

The consideration of professions, and modes of life, leads us to the study of

* Vide Parent-Duchâtelet: Concerning Prostitution in the city of Paris, etc., Paris, 1836, t. I. p. 262.

morals, relative to mental alienation; which, of all maladies, is that whose dependence upon public and private morals, is most manifest.

Humboldt states, that he saw little insanity among the savages of America.

M. Carr in his *Eté du Nord*, states that it is rarely met with in Russia, except in the large cities. In France, there is less insanity in the country, than in cities.

The countrymen are more apt to contract religious, or erotic insanity. Among them, insanity is caused by the simple passions, love, anger, and domestic chagrin; whilst in cities, it is produced by wounded self-love, disappointed ambition, reverses of fortune, etc.

The less depraved morals of the Anglo-Americans, are one of the causes, in consequence of which there is less insanity among them than elsewhere; as the reports of travelers prove, not less than the records of their own hospitals.

In England, where we find united all the caprices, as well as the excesses of civilization, insanity is more frequent than any where else. Unsuitable marriages; those contracted by parents, and above all, alliances formed with families where there is an hereditary predisposition to insanity, the hazards of remote speculations, the indolence of the rich, and the habitual use of alcoholic drinks, are the causes which multiply insanity in England. "Every thing degenerates in the hands of man," said J. J. Rousseau. Without doubt, civilization occasions diseases, and augments the number of the sick, because, by multiplying the means of enjoyment, it causes some to live too well, and too fast. But the more perfect civilization becomes, and the more the life of the common people is ameliorated, the greater will be its medium duration. Moreover, it is not civilization that we are to accuse, but the errors and excesses of all sorts, which it enables us to commit.

The morals of the Italians, render religious melancholy and erotomania, very frequent in Italy.

The ignorance of the middle ages, caused demonomania and vampirism to multiply, and they are now reunited in the extreme north of Europe, as well as in other countries which civilization has not illuminated with its light, nor enriched by its benefits.

For thirty years, the changes that have been going on in our morals in France, have produced more insanity than our political troubles. We have exchanged our ancient usages and opinions, for speculative ideas, and dangerous innovations.

Religion comes in only as a usage in the most solemn acts of life,—it no longer brings consolation and hope to the unfortunate. Religious morality no longer guides the reason, in the straight and difficult paths of life:—A cold egotism has dried up all the sources of sentiment. There is no more domestic affection, nor respect, nor love, nor authority, nor reciprocal dependencies. Each lives for himself; no one forming those wise combinations, which connect the present, with coming generations.

The ties of marriage are mere pretences, which are formed by the wealthy, either as a speculation, or to gratify their self-love; and which the common people neglect, through disdain for the clergy, indifference and libertinism. These deplorable facts, have prevented me from taking an account of the marriage state, of celibacy, or widowhood, among women who enter our hospital, and consequently, from being able to appreciate, among them, the influence of marriage in the production of mental alienation.

About one fourth of the persons admitted into my establishment were bachelors; twenty-six only, were widowers. Having been concerned in the treatment of many soldiers, as well as students, this proportion of single men, of the higher class, will not be surprising.

The change in our morals, will be felt longer, in proportion as our education is more defective.

We take great care to form the mind, but seem to forget that the heart, like the mind, has need of education.

The ridiculous and deplorable tenderness of parents, subjects to the caprices of infancy, the reason of mature age.

Each gives to his son an education superior to that which is suited to his social position and fortune; so that children, despising the knowledge of their parents, disdain the reproofs of their experience.

Accustomed to follow all his inclinations, and not being habituated by discipline, to contradiction, the child, having arrived at maturity, cannot resist the vicissitudes and reverses, by which life is agitated. On the least adversity, insanity bursts forth; his feeble reason being deprived of its support, while the passions are without rein, or any kind of restraint.

When we add to these causes, the manner of life of the women in France, the insatiable relish which they have, for romances and the toilette, for frivolities, etc., together with the misery and privations of the lower classes, we shall no longer be astonished at the disorder of public and private morals, nor any longer have a right to complain, if nervous disorders, and particularly insanity, multiply in France; so true is it, that whatever relates to the moral well-being of man, has always a most intimate connection with his physical well-being and the preservation of his health.

We believe also with Pinel, that an undue severity,—that reproaches for the slightest faults, that harshness exercised with passion, that threats and blows, exasperate children, irritate youth, destroy the influence of parents, produce perverse inclinations, and even insanity; especially, if this severity is the result of the caprices and immorality of fathers.

This system of severity, is less to be feared at this day, than that of which we have spoken above, particularly among those in easy circumstances, and the wealthy.

The depravations of both minds and morals, which are effected by the vices of our education, by disdain for religious beliefs, and by the faultiness of public morals, exercises its influence, upon all classes of society.

But how happens it, that we never cease to declaim against the higher class, and to extol the virtues of the people?

These philosophical declaimers, lived with the great whom they calumniated, and knew not the people. If they had studied the morals of their country, they would have been convinced, that the corruption is most general, greatest, most hideous, among the lower class; that it gives birth to almost all the evils of society; that it produces much insanity, and at the same time much more of crime than in the higher classes.

The vices of education in the higher classes, and the want of it in the lower, explain these differences. Education, supplies the place of morals among the former; while *no* motive suspends the arm of the mob.

If the form of government influences the passions and morals of nations, we must not be surprised, that it exercises some influence, on the production and character of insanity.

Scott, the companion of Lord Macarthney, saw but very few insane persons in China.

All travelers assure us, that there are less than elsewhere, in Turkey, Spain and Mexico.

It is, say the English, because those countries groan under a despotism, which stifles the intellect, and represses the passions.

On the other hand, a republican or representative government, in giving more play to all the passions, ought, other things being equal, to be more favorable to the production of insanity.

The laws which confiscated the property of the condemned, under the Roman Emperors, multiplied suicides. It was the same in France, during the reign of terror.

A notary of Paris, enquires of one of his friends, if the father of a family, by taking his own life, would preserve his fortune for his wife and children. On receiving an affirmative reply, he drowned himself.

A military government which inspires contempt for life, multiplies suicides, because the people attach a greater value to some other good; being ready, every day, to sacrifice themselves to their ambition.

The law of conscription increased insanity in France, and at each period of departure, we observed an increase of insanity, either because the conscripts themselves became insane, or their parents or friends.

Political commotions, by arousing to greater activity all the intellectual faculties, by rendering more intense, the depressing and vindictive passions, fomenting the spirit of ambition and revenge, overturning public and private fortunes, and changing the circumstances of all men, produce a vast amount of insanity.

This is what took place in Peru after its conquest by the Europeans; also in England, more than a century since. The same occurred in America after the war of independence, and in France during our revolutions, with this difference between us and the English, that in England, according to Mead, it was those, who had recently acquired fortunes, that became insane, whilst in France almost all who had escaped the sythe of the revolution were seized with mental alienation.

The influence of our political misfortunes has been so great, that I could give the history of our revolution from the taking of the Bastile to the last appearance of Bonaparte, from that of certain insane persons, whose insanity connects itself with the events which have signalized this long period of our history.*

Here the question, so often propounded for forty years, presents itself; Is there now more insanity than existed previous to the revolution? I am going to hazard my opinion with respect to it.

Political commotions, like prevailing ideas, are not the predisposing, but the exciting causes of insanity. They call into action this or that cause, and impress this or that character upon the insanity; but this influence although general, is momentary.

At the destruction of the ancient monarchy, many individuals became insane, through fear, and the loss of fortune.

When the pope visited France, the religious forms of insanity were more numerous. When Bonaparte made kings, there were many Queens and Kings in Houses for the Insane.

At the epoch of the invasions of France, terror produced much insanity, particularly in the country. The Germans had made the same observations, at the time of our irruptions into their country. The individual, who now becomes insane by the loss of his fortune and rank, would have become so fifty years before, in consequence of the loss of his fortune at sea, or after a disgrace at court: that, whom the terrors of the revolution rendered insane, would have become so, two centuries ago, through fear of sorcerers and the devil.

But why do we see so many, insane at the present day? Why has their number doubled at Paris within thirty years? Why in 1786, were there at Paris, but one thousand and nine insane persons, whilst in 1813, there were

* I could continue this comparative history even to our own time. A magistrate believed himself accused of the wicked attempt of Fieschi, and two young men believed themselves the accomplices of Alibaud.

two thousand; and about four thousand in 1836? We must conclude from this progressive augmentation of the insane at Paris, that their number must have doubled elsewhere. It has doubled and indeed tripled at Paris, because, since the impulse given by Pinel, they have multiplied the means of relief at the capital; the asylums open to the insane are increased in size, and improved in their condition; the physicians devote themselves to this service more especially; better care is taken of the sick, and a greater number are cured. We speak of them with more interest and hope; they are more in evidence; and their life is prolonged. From a record kept for ten years at the Salpêtrière, it is shown that one third of the women, admitted into the class of the insane of this hospital, are very aged, paralytic, and in senile dementia. The same is true at Charenton and at the Bicêtre. These infirm patients would have remained formerly, in their families; but the hope of a cure, causes them to be brought, at this day, into establishments where they are submitted to remedial treatment.

People avail themselves of an easy means of relieving themselves from the burthen of their support.

This fact, furnishes the reason for the frightful increase of the inmates of the hospitals of France; where they receive as insane, all those individuals who are presented, with no other condition, than that they are in a state of delirium.

In those cities where they have augmented the size, and improved that portion of their hospitals devoted to the insane, as at Limoges, Orléans, Toulouse, etc., in cities where they have erected establishments, especially designed for this class, as at Bordeaux, Rouen, Caen, Nantes, Lyons, Mans, etc., the number of the insane has wonderfully increased.

It is remarkable, that this increase has no where taken place, except where the erection of buildings, and improvements in their treatment have begun.

Formerly, the insane were admitted into certain convents and religious houses, where they were subjected to the supervision of the police.*

From all these considerations, we may conclude, that if the number of the insane has increased since the revolution, this augmentation is more apparent than real; that it is far less considerable than we are accustomed to suppose; that this increase is less due to the storms of the revolution, which were transient, than to the profound change which it has effected in our morals, whose influence is more durable. Let us not seek, by exaggerating them, to thicken the evils which, for so many years have weighed down our unhappy country.

7. *Passions.*—During the last century, we gave great importance to the study of the intellectual and moral man. Cabanis, embellished his researches with the most seductive diction, and reduced almost to a demonstration, the reciprocal influence of the moral upon the physical.

Crichton has made a more direct application of the study of the passions, to the causes of mental alienation. Pinel, in the second edition of the *Treatise on Madness*, has adopted the division of the passions proposed by Moreau de la Sarthe. This division, is based upon pathological views.

Thus Moreau and Pinel regard the passions as spasmodic agents, debilitating or exciting, which produce insanity.

Is this division, which ought to be especially agreeable to physicians, of general application in the study of mental alienation?

In my *Dissertation on the passions, considered as causes, symptoms and curative means of mental alienation*, I have principally considered them, as the most essential symptoms, and the most powerful therapeutic agents in insanity.

The first wants of man, limiting themselves to those connected with his

* I discussed this question in a memoir, entitled, "*Are there more insane persons now than formerly*"?

preservation and reproduction, provoke the determinations of instinct; an internal impulse leads us to gratify them.

The secondary wants, attach themselves to the first, and the desires which they excite, acquire as much more energy, as we have means of satisfying them. They produce the primitive passions; in fine, they are the wants which are connected with our preservation; and are the fruit of our increased intelligence and civilization. They engender the factitious passions,—those passions which cause the greatest injury to man, especially in the higher walks of life.

Infancy, exempt from the influence of the passions, is almost a stranger to insanity; but at the epoch of puberty, the sentiments, unknown until this period, cause new wants to arise. Insanity then appears, to trouble the first moments of the moral existence of man.

At mature age, the relations become extended, social wants multiply, and the passions take a new character. In proportion as the amorous passions become enfeebled, those of a factitious nature grow strong. Personal interest, ambition, love of distinction, and avarice, replace the charms of love and delights of paternity.

At this period of life also, mental alienation appears; insanity is more obstinate, and more concentrated. It passes more readily into a chronic state; and is more dependent upon abdominal lesions.

A sense of his weakness, renders the old man more calm; and while meditating upon the errors to which the passions lead, he isolates himself, and becomes an egotist.

Insanity from a moral cause, rarely exists with him, and when he loses his reason, it is because his organs are fatigued and exhausted. Hence, it is neither mania nor monomania which is developed, at this period, but senile dementia.

Of all moral causes, those which most frequently produce insanity, are pride, fear, fright, ambition, reverses of fortune, and domestic trouble. This last should have been placed, relative to its great influence, at the head of moral causes, if it be limited to a simple idea; but by domestic troubles, I express all the pains, all the griefs, all oppositions, misfortunes and dissensions, that grow out of the family state.

One can scarcely imagine how strongly this cause operates upon the minds of the people, especially females. Forgetful of all principle, habits of immorality the most vile, and often the most criminal, render prostitutes the victims of the most ferocious brutality.

The gay and enlivening emotions, are rarely the cause of this malady. It is singular, that the excess of joy which destroys life, never takes away the reason, while anxiety and chagrin so often cause its loss. Some authors however, are of the opinion, that this class of emotions have caused insanity.

Mead assures us, that fortunes rapidly acquired, produce insanity in England.

But are they not seized with this disorder, in consequence of laying aside their former habits, of living in idleness, of committing every variety of error in regimen, and because their newly acquired wealth, being the fruit of spoliations and intrigues, fills them with disquietude, not being in the habit of enjoying it.

In examining with care, the causes of certain cases of insanity which have been attributed to joy, I have assured myself that it was a mistake.

A minister informs his relative of his nomination to an important place. The latter, stricken as with a blow at the epigastrium, falls suddenly into hypochondriacal lypemania. Joy had no effect in bringing about this malady, as was universally supposed, but rather despair at quitting a mistress.

A young man gains a prize in a lottery; some days after he is seized with

insanity; it is reported that excessive joy has produced this affecting result. It is not joy, however, but the fear of being robbed, and losing his treasure

One of the moral causes pointed out by Pinel, and which is frequently met with in practice, is the conflict which arises between the principles of religion, morality, education and the passions.

This internal wrestling, continues for an indefinite period of time, and ends by producing insanity, and even characterizing certain forms of lypemania.

Religious fanaticism which caused so much insanity formerly, has now lost all its influence, and very rarely produces this disorder.

Among more than six hundred insane persons, eight only became so in consequence of religious terrors.

I have never known insanity to be produced by ascetic exaggeration but in a single instance, among 337 individuals admitted into my establishment. Love, which so often causes erotomania, and even nymphomania in warm countries, has lost its empire in France. Indifference has taken possession of the mind, and the amorous passions, have neither the exaltation nor the purity, which would engender erotic insanity.

Moral causes act sometimes individually: at others, several combine to overthrow the same individual. A young man is stricken with mania. The conscription has just taken from him both his place and liberty.

A young man pays his addresses to a lady whose parents refuse to permit their union. He is sorrowful and dejected. Some months after, on being informed that she whom he adores, is married, he betakes himself to the place where the nuptials are celebrated, and there blows out his brains.

A young lady is married in obedience to the wishes of her parents. She appeared happy, though often sad. A year after, her husband is ruined. She supports this new trial, but loses her reason, on learning that he is unfaithful also.

Moral causes unite ordinarily with physical, particularly among women.

A young person during the catamenial effort, is frightened by a sudden clap of thunder, and her menses are suppressed. She becomes insane, and reason is established only after the restoration of this accustomed discharge.

A young woman is confined happily. On the seventh day, her father reproaches her violently, and unexpectedly. Both the lochia and milk are suppressed. The lady becomes a maniac, and falls into a state of dementia after a month of intense excitement, and is cured at the end of six months.

This combination of physical and moral causes, is much more frequent in the production of insanity, than the isolated action of either of them.

TABLE OF MORAL CAUSES. No. VI.

Salpêtrière during the years 1811 *and* 1812.		*My Establishment.*	
Domestic troubles	105		31
Disappointed affection	46		25
Political events	14		31
Fanaticism	8		1
Fright	38		8
Jealousy	18		14
Anger	16		0
Misery, and reverses of fortune	77	Reverses of fortune	14
Wounded self-love	1		16
Disappointed ambition	0		12
Excessive study	0		13
Misanthropy	0		2
Total	323	*Total*	167

Moral causes are much more frequent than physical. A comparison of the record of moral causes, kept at my establishment and at the Salpêtrière, proves this, and the reports which I have since made at the same hospital, and at Charenton, confirm it.

The Memoir, read by Pinel at the Institute, in 1807, also demonstrates the same fact.

A report, made in Pennsylvania in 1812, gives the same result, since among fifty insane persons from whom their account was made up, thirty-four had become so, as a result of moral affections, and sixteen from physical causes.

Experience has demonstrated the same thing to Mr. Tuke, founder and director of the Retreat near York; and in fine, the same has been every where observed, because man is every where the same.

In comparing the two reports, relative to fortune and rank in society, we may conclude, that moral causes are more numerous among the rich, since the first column embraces six hundred insane poor, and the second three hundred and thirty-seven.

Physical causes act more frequently upon women than men; and we shall readily perceive that this must be so, if we call to mind the numerous accidents to which women are liable, during the period of menstruation, pregnacy and lactation. These causes produce a powerful influence upon the lower classes. The form of insanity which they produce, is ordinarily dementia.

In like manner, there exist certain atmospheric conditions, which, at some seasons, render maladies epidemic or contagious. In minds also, there exist certain general dispositions, which cause mental alienation to extend, and communicate itself to a great many individuals, by a sort of moral contagion.

It is what we have observed at all times, and in all countries. The example of the daughter of Prœtus was contagious. The women of Lyons fell into suicidal lypemania, in imitation one of another.

Demoniacal possessions, which have afflicted different countries of Europe, even to the commencement of the last century, establish in a satisfactory manner, the existence of this influence, which besides, allies itself to all the phenomena of sensibility. Examples will multiply, when I speak of monomania and suicide.

The causes of which we have spoken heretofore, and which we may call general, differ from the following, in this respect, that the latter are more individual. They act more immediately upon the organism. Their action is more appreciable, and can, to a certain extent be prevented. The means proper to combat their results, ought to be added to the list of pharmaceutic agents.

Such are the causes, which we have called more particularly physical, while the preceding have been hygienic, intellectual or moral.

PHYSICAL CAUSES. No. VII.

Salpêtrière.		*My Establishment.*	
Hereditary	105		150
Convulsions of the mother during gestation	11		4
Epilepsy	11		2
Menstrual disorder	55		19
Results of confinement	52		21
Critical period	27		11
Progress of age	60		4
Insolation	12		4
Blows or falls upon the head	14		4
Fevers	13		12
Syphilis	8		1
Mercury	14		18
Intestinal worms	24		4
Apoplexy	60		10
Total	466	*Total*	264

Hereditary predisposition is the most common, among the remote causes of insanity, particularly among the rich; and is in the proportion of one sixteenth among the poor. I believe, nevertheless, that the proportion is greater, even among the latter.

If, from my records of the Salpêtrière, this cause appears feeble, it is in consequence of the difficulty which attends the making up of correct returns, among women who are often ignorant, even of the name of their parents. Mason Cox attributes great influence to this predisposition. Little however, is accorded to it in Pennsylvania, by Rush.

It is remarkable in England, especially among the Catholics, who always ally themselves in marriage, with those of their own denomination. The same may be said of the great lords of France, who are almost all parents. What a lesson for fathers, who in the marriage of their children, consult rather their ambition, than the health of their descendants.

Insanity is rather transmissible by mothers, than fathers.*

Children who are born before their parents have become insane, are less liable to mental alienation, than those whose births take place afterwards.

The same is true of those who are born of parents, who are insane only upon the paternal or maternal side, compared with those, both of whose parents are insane, or who have progenitors on both sides in this condition.

Burton assures us, that those begotten of aged parents, are predisposed to melancholy.

This fatal inheritance is pictured upon the physiognomy, and external forms; as well as the ideas, passions, habits and inclinations of those who are destined to become the victims to it. Attracted by some one of these signs, I have sometimes foretold an attack of insanity, many years before it made its appearance.

Hereditary mania manifests itself among parents and children, often at the same period of life. It is provoked by the same causes, and assumes the same character.

A Swiss merchant saw his two sons die insane, at the age of nineteen years.

* I have in charge at the present time, many children whose parents were under my care, during the first years of my medical practice.

A lady became insane at twenty-five years of age, after confinement. Her daughter becomes so, at the same age, and from the same cause. In the same family, both father, son and grandson, commit suicide at about the fiftieth year of their ages respectively.

We have had at the Salpêtrière a prostitute, who has thrice thrown herself into the river after her frantic revels. Her sister drowned herself in a state of intoxication. There lives in the environs of Nantes, a family of whom seven brothers and sisters are in a state of dementia. A gentleman, shocked at the earlier events of the revolution, remains during ten years, shut up in his apartment. His daughter at about the same age, falls into a similar state, and refuses to leave her apartment.

This predisposition, which manifests itself by the external conformation, by the moral and intellectual character of individuals, is not more surprising with reference to insanity, than to gout, phthisis pulmonalis, etc. It is noticeable, even from infancy. It will explain a multitude of whims, irregularities, and anomalies of character, which should betimes, have put the parents on their guard.

It may prove a useful hint, to those who preside over the education of children born of insane parents. It will be proper to give to these children a peculiar education, to exercise them much in gymnastics, to inure them to external impressions; in fine, to place them in a condition different from that of the authors of their being, according to the precept of Hippocrates; who recommends that the constitution of the individual should be changed, to prevent those maladies, to which, by hereditary descent, it is liable.

What has been said with respect to physical education, I would also say with respect to the moral and intellectual. We must be on our guard, against whatever may unduly excite the brain.

Sometimes it is to the maternal womb, that we are to look for the first cause of insanity; not only idiocy, but the other forms of mental alienation. I know not why this circumstance has escaped the notice of observers.

At others, it is during the period of nursing, or the first dentition, that the elements of the malady take root in the system, which is at a later period to appear. According to Van Swieten, almost all the insane have had convulsions during their infancy. I have, however, observed several insane young persons, who, during their infancy, and at puberty, had escaped cerebral fevers.

Sometimes, strong impressions, received in early life, are also the remote cause of insanity. Many women, who were pregnant at various periods of the revolution, have become the mothers of children, whom the slightest cause has rendered insane. A female of the lower orders is pregnant; and her husband, under the influence of wine, threatens to beat her. She is frightened, and sometime after is confined, with a child of exceedingly delicate health, who is subject to panic terrors, and who, at the age of about eighteen years, becomes insane. A lady, while pregnant, exposes her life a thousand times, to save that of her husband. She has convulsions, and is confined. Her daughter, born feeble, and subject to terrors, is married, and becomes the mother of four children. At twenty-three years of age, frightful thoughts of assassination and murder, alone occupy her mind, and render her furious.

A young child, three years of age, who was brought to the Bicêtre, is frightened at the bears exhibited there, as a curiosity. From that time, he was subject to frightful dreams, and at seventeen years of age, was seized with mania.

A girl, six years of age, sees her father massacred, and has since been subject to panic terrors. At fourteen, her menses were imperfectly established, and she becomes a maniac. She wishes to rush upon every body. The sight

of a knife or weapon, or of many men assembled, excites her to the most violent fury.

Falls upon the head, even in earliest infancy, predispose to insanity, and are sometimes the exciting cause of it. These falls, or blows upon the head, precede by many years, the explosion of delirium.

A child of three years of age, falls upon his head. He complains from that time of headache. At puberty, the pain in the head increases, and mania manifests itself at the age of seventeen years. A lady, returning from a ride on horseback, strikes against a gate, and is thrown from her horse. Some months after, she becomes insane, is cured in about three months, and dies two years afterwards in consequence of a cerebral fever.

Rush relates several analogous cases.

Masturbation, of which we have spoken under another head, is signalized in all countries, as one of the frequent causes of insanity.

Sometimes it is the prelude of mania, of dementia, and even of senile dementia. Its effects are more deplorable upon men, than women.

It is a great obstacle to the cure of those, who give themselves up to the frequent practice of this vice, during the course of their disease.

Cretins, idiots, and individuals in a state of dementia, abandon themselves to it, with a sort of fury. Continence, although rarely, sometimes causes insanity.

Buffon has borrowed at Espion (turc) a very remarkable fact, since extensively copied, viz., that mania has been caused by continence.

Is widowhood, which we have elsewhere considered under the head of morals, a cause of mental alienation? It is not easy to ascertain the effect of this influence upon the women at the Salpêtrière, as their mode of life, both before and after marriage, renders continence impossible.

Among the wealthy belonging to this class, whose morals are generally correct, I have found, among one hundred and forty-four individuals, admitted into my establishment, forty-four single women, eighty who were married, and twenty widows.

The proportion of single persons is much greater among the men, since of one hundred and ninety-two, sixty-one were not married, and eight only were widowers.

I have seen some young women who, having been violated, have lost their reason. Shame and mortification were the cause of their malady.

I have had charge of a lady who was seized with an attack of mania on the first night of her marriage. Her modesty was shocked, at being obliged to lodge with a man.

An extremely nervous young woman, was so painfully affected by the first approaches of her husband, that her reason forsook her immediately.

Menstruation, which performs so important a part in the economy of woman, cannot be a stranger to the production of mental alienation. It even occupies the sixth place among physical causes.

The first menstrual effort, sometimes produces insanity. This observation did not escape Hippocrates.

Disorders of menstruation, provoked by physical or moral accidents, or by the progress of age, multiply the conditions, favorable to mental alienation.

Now, the menses are suppressed suddenly, and insanity speedily ensues. Now, they present remarkable anomalies, either as it respects the period of their return, or the quantity and quality of the discharge, before insanity declares itself.

Sometimes the menses are very abundant, and appear at brief intervals, for a short time before the invasion of insanity.

In fine, there are cases, where insanity manifests itself, without the least menstrual disorder.

The period of the menstrual returns, is always one of excitement among insane women, even with those whose menses are not deranged.

Leucorrhœa, which is often supplementary to the menses, to which prostitutes, and women who lead a sedentary life are so subject; when suppressed, also causes insanity. I add that this cause is more frequent than is generally supposed, and that the knowledge of this fact, may become a very valuable therapeutic indication.

The suppression of hemorrhoidal discharges, is almost as fatal to men, as that of the menses is, to women; but its influence, being exerted at a more advanced age, most frequently produces melancholy and dementia.

Is pregnancy the cause of insanity, and is it complicated with this disease in any case? I speak not of the longings of pregnant women, nor of the moral perversions observed among them.

Writers on legal medicine, report several cases of it. I have seen a very nervous young woman, who had an attack of mania, on the first night of her marriage, and a second on the first day of conception. The same was true at her second pregnancy. These attacks lasted but about fifteen days. We have seen at the Salpêtrière, many women become insane during pregnancy. If this ought to be ranked among physical causes in some cases, there are others where it is set in action by moral ones.

Shame, chagrin, and fear, are then the true causes of the malady.

A lady, on the second day of her confinement, leaves her bed, and sprinkles a large quantity of Cologne water over her garments, and about her apartments. The next day she is a maniac. A lady experiences a moral affection on the seventh day of her confinement. The lochia are suppressed as well as the milk; and she becomes furious.

But insanity takes place more frequently after confinement and during lactation, than during pregnancy. According to a report made at the Salpêtrière, of six hundred insane women, 52 had lost their reason after confinement or lactation. Of 144 insane women belonging to the wealthy class, 21 were taken sick, as the result of their confinement, or whilst they were nursing. This last influence, is therefore more active still, among the latter, than women of the lower classes.

Haslam enumerates 84 women who became insane as the result of confinement, out of 1664 admitted at Bethlem. Rush found 5, out of 70 received at Pennsylvania. At Charenton, those who became insane in consequence of confinement, are very rare.

We have had, at the Salpêtrière, women who became deranged after each confinement, and one among them, after every second confinement.

A lady who had an hereditary predisposition, became insane at the third month of lactation.

Hippocrates said that the blood, which mounts to the breasts of nurses, presages mania.

Planchon cites a case of it. But is the suppression of milk a cause or effect of delirium? It has been pretended, that it is always the result of the cerebral affection; but this has not been demonstrated in every case. There are cases in which insanity appears, while the milk is not suppressed; but this suppression, most frequently precedes alienation. Sometimes delirium increases, in proportion as the milk diminishes; while it ceases, on the re-establishment of this secretion. These cases of alienation, of which we shall not attribute the cause to ecstasy, or to the accumulation of milk in the cranial cavity, are cured even in a few days, but more frequently after five and six months, or a year.*

* Vide hereafter: Concerning the mental alienation of the newly confined, and of nurses.

The first dentition, by causing convulsions in children, predisposes to insanity; while the tardy appearance of the teeth, has sometimes provoked this malady.

The suppression of the transpiration, which is determined by the moral affections, ought to stand conspicuous among the causes of mental alienation. It is by its suppression, that atmospheric vicissitudes, the humidity of the soil, errors of regimen, excessive study, and the passions, produce insanity.

A man about forty-six years of age, was accustomed to perspire copiously from his head. He was advised to bathe it with cold water. The perspiration was suppressed by degrees, and dementia established.

A young man in a state of perspiration, crosses a streamlet. He retires with a chill, and immediately becomes a maniac.

Fevers of a grave character, leave after them a chronic delirium which must not be confounded with mental alienation; nor must we confound continued, or intermittent ataxic fevers, with insanity, at its first appearance; a point of practice well worthy the attention of the physician,—inasmuch as, mental alienation at its invasion, often presents almost all the characters of ataxic fever, or inflammation of the meninges of the brain, and reciprocally.

These fevers, and inflammations of the meninges and encephalon, by enfeebling the cerebral system, predispose to insanity, which appears after some months, sometimes years.

We often meet with young men of eighteen, twenty, and twenty-five years, who are suddenly seized with mania, without other appreciable cause, than an acute cerebral affection, which had taken place before, or at the period of puberty.

The presence of various substances in the first passages has produced, by sympathy, mental alienation.

Mucous, bilious, and depraved masses in the stomach, worms in the intestinal canal, tæniæ, lumbricoides and strongyli, have produced insanity.

I speak not of the effect of poisons, although their mode of action upon the cerebral functions, merits the greatest attention on the part of one who would thoroughly understand the lesions of the intellectual faculties. Poisons produce a consecutive effect, which, in altering the sensibility, causes a secondary insanity, whose cure is very difficult.

A great number of chronic affections, either in consequence of their inconsiderate suppression, or by their metastasis, produce insanity.

Hippocrates said, that the checking of expectoration, in cases of phthisis, occasions wandering of the intellect. It is certain that phthisis causes, or at least precedes mental alienation, and alternates with it.

Epilepsy, sooner or later, leads to insanity, either in infancy, or at a more advanced age. Of the three hundred epileptics who reside at the Salpêtrière, more than one half are insane. The same is true of those at the Bicêtre and at Charenton. Some are idiots or imbeciles, others in a state of dementia, and others still, maniacs, and even furious.

The fury of epileptics, has a character of ferocity which nothing subdues; and it is this circumstance that renders it so formidable in all hospitals for the insane.

Hysteria and hypochondria degenerate, and often pass into insanity, and in many cases are only the first degree of it. This has caused these maladies to be confounded with mental alienation, by a great number of authors, as well ancient as modern.

Apoplexy often terminates in dementia, which is complicated with paralysis. The suppression of a nasal discharge, of blennorrhagia, of an ulcer or issue, has produced insanity, as well as the retrocession of psora, tetter, gout or rheumatism. The suppression of these affections, is not always the cause of insanity, but usually precedes its invasion. The abuse and even the use of

medicines which act powerfully upon the nervous system, have caused insanity among those who were predisposed to it. It is not rare that persons become insane, during a mercurial treatment. We can say as much of the abuse of opium, and other narcotics.

We have already seen, that those occupations which expose the person to the fumes of charcoal, predispose to insanity. We ought to add, that asphyxia by carbon, is very liable to cause dementia, and that too in its incurable form.

III. COURSE OF INSANITY.

In this section, after having traced in a general manner, the course of insanity, I shall give some details respecting its terminations; and close by considerations concerning the cure, and mortality of the insane.

The causes of mental alienation, do not always act directly upon the brain, but upon organs more or less removed therefrom.

Now, the extremities of the nervous system, and the foci of sensibility situated in different regions; now, the sanguine and lymphatic systems; now, the digestive apparatus; the liver and its dependencies, or the organs of reproduction, are each, respectively, the point of departure, or the malady.

Here arrange themselves naturally, the considerations respecting the influence of different organs, in their physiological, or pathological states, upon the sensations, ideas, understanding, and will; as well as upon the passions and determinations of man; so thoroughly understood by Cabanis, Cogan, Crichton, and Moreau de la Sarthe.*

Predisposing causes sometimes act with so much energy, as to produce insanity, without any apparently exciting cause, and reciprocally; so that the causes of mental alienation, cannot be rigorously classed, according to their degree of influence.

Proximate or exciting causes, whether physical or moral, act promptly.

Generally, their effect upon the system is slow, especially in the production of dementia, and even lypemania.

I am convinced that these causes act promptly, only in cases strongly predisposed to insanity. Almost all the insane, presented before their sickness, certain functional changes, which extended back many years, even to earliest infancy. The greater part had suffered from acute encephalic inflammations, convulsions, pains in the head, colics, cramps, constipation and menstrual irregularities.

Many were endowed with great activity of the intellectual faculties, and had been the sport of the most impetuous, and angry passions. Others still had been peculiar in their ideas, affections and actions.

Some, led away by a disordered imagination, would have been incapable of a systematic course of study; others, obstinate to excess, could live, only in a very limited circle of ideas and affections; whilst many, without intellectual and moral energy, were timid, fearful, irresolute, and indifferent about every thing. With these dispositions, an accidental cause only is wanting, to produce an attack of insanity.

But insanity, like all other maladies, has its period of incubation, its premonitory indications, and often in the history given by friends, it is discovered that the first act of insanity which frightened them, had been preceded by many symptoms, which escaped all observation. Sometimes, the early phenomena of the disease, are regarded as the cause of the malady.

The insane often combat their false ideas and unusual determinations, be-

* Mental diseases; Encyclopedia methodical.

fore any one perceives the disorder of their reason, and the internal struggle which precedes the outbreak of insanity.

A long time before an individual may be regarded as insane, his habits, tastes and passions, change. One surrenders himself to wild speculations, which do not succeed; and the consequent reverses are not the cause, but the first effect of the malady.

Another, all at once engages in the loftiest acts of devotion, and is present at the delivery of a sermon, from which he goes away stricken with fear, believing himself damned. The sermon would not have produced this effect, if the malady had not previously existed.

A young lord, without any motive, undertakes a voyage of many years' duration, eight days before the confinement of his wife. He experiences some opposition during the voyage, and after six months, his mental alienation becomes manifest. Was not this voyage the first act of his insanity? It often happens also, that the evil exists, at a time when it is not suspected.

M. ***, about sixty-four years of age, of a dry and nervous temperament, who had led a very quiet, moral life, suddenly leaves his house, under the pretext of taking a walk.

His wife, suspecting something, ordered his valet to follow him. He sees his master enter a most disreputable place. Upon the slightest allusion to it, the old man has a furious paroxysm of anger, which, after five days, terminates in dementia.

Insanity is continued, remittent or intermittent.

Continued insanity has a regular course, a space of time that it is to run, and three distinctly marked periods. A first period acute, with concomitant sypmtoms; a second, chronic, almost always exempt from symptoms foreign to the delirium. The third and last period, is that of the decline and cure.

But this course is easy to recognize, only in acute or accidental cases of insanity; or in attacks of intermittent insanity. It is never observed in idiocy, nor in dementia.

Remittent insanity offers very remarkable anomalies, either as it respects its character, or the duration of the remission.

This, in some cases, is but the passage from one form of delirium to another.

Thus, an insane person passes three months in lypemania, the three following in a state of mania, and finally, four months, more or less, in dementia; and thus successively; now with great regularity, and now with striking variations.

A lady, aged fifty-two years, is one year a lypemaniac, and one, maniacal and hysterical. In other circumstances, the remittence presents only a sensible diminution of the symptoms of the same species of insanity.

Thus, there are maniacs, who are agitated, violent and passionate, only at certain periods of the day, at certain hours, and at certain seasons; whilst their delirium is calm and peaceful the rest of the time.

There are those, whose lypemania becomes more profound and oppressive at irregular intervals; while it usually offers all the characteristics of a fixed delirium, combined with the gay and pleasurable emotions. The seasons, and also menstruation, produce a recurrence of the same symptoms, and delirium; the same exaltation and oppression.

Intermittent insanity is quotidian, tertian, quartan, monthly and annual. In fact, attacks recur after an interval of many years. It is now regular; now irregular. In the first case, the same season and period of the year; the same physical and moral causes, bring back a malady, having the same character, crises and duration. More generally, the attacks return at very variable intervals. They are provoked by new causes, and do not present the same form of delirium. Their duration and crises are different; and the attack breaks forth, sometimes suddenly, but is more frequently announced by various

signs, which are ordinarily, the same with those which have preceded the first attack.

Among the insane, some suffer from cephalalgia, insomnia or somnolence. They lose their appetite or eat voraciously. They suffer also, from constipation, abdominal pains, intestinal heat, etc. Others have presentiments, dreams, and strange ideas. We see those, whose attack is always preceded by great loquacity, by an unusual inclination to the pleasures of love, by an irresistible desire to move about, and to whistle. There are others whose character and affections, tastes and habits, are changed. They become irritable, querulous, suspicious, and choleric ; or taciturn, gloomy and melancholic. Finally, after some months, weeks, days or moments, the attack bursts forth, runs its course, and terminates by crises more or less complete. Not unfrequently, the attack ceases abruptly, without any precursory indication of its approaching termination.

We have just seen, that insanity, in some sort transforms itself, and that the different forms of delirium, replace, and succeed each other.

We ought to add, that by their complication, binary or ternary compounds are formed.

Lypemania complicates itself with mania; dementia, with mania and monomania. I have seen an imbecile yield to an attack of chagrin. In fine, we have seen the insane, who had fallen into a state of dementia, preserve the primitive character of their delirium, and have at intervals, attacks of mania and even fury. Many observations, detailed farther on, will demonstrate these combinations.

Insanity is very often complicated with cerebral lesions, such as chronic inflammation of the meninges, paralysis, convulsions, epilepsy, hypochondria and hysteria. It is complicated with affections of the lungs, of the heart and intestines, and of the skin ; either because these latter maladies have preceded insanity, and ceased at its incursion, or proceed simultaneously, or alternate with it.

The insane are not secure against intercurrent maladies, and epidemics. The latter, often have an influence, more or less marked, upon insanity ; either suspending its march, causing it to cease, or terminating the life of the insane.

Why is not the doctrine of crises, applicable to mental alienation? Has not insanity its causes, symptoms, and a course which is proper to it? Why should it not terminate like other maladies? The cure is certain, only when it has been marked, by some sensible crisis. When insanity ceases suddenly, without our being able to assign any critical cause, we ought to fear, lest we have to do with its intermittent form. If insanity pass so often into a chronic state, it is because the critical efforts are rarely perfect, and often abortive, for the following reasons ; 1, because the malady attacks enfeebled subjects ; 2, because its most common causes are debilitating ; 3, because the susceptibility of individuals, and the ataxia of the symptoms, interfere with the course of nature. Hippocrates, Celsus, Cœlius, Boerhaave and Pinel, have pointed out many crises of insanity, as well as all the physicians who have written respecting it. These crises are physical or moral. They are observed only in monomania, lypemania, mania, and acute dementia. They do not occur in imbecility, or in chronic or senile dementia.

Insanity terminates by resolution. Paleness of the face, which was of a lively red, or earthy brown ; the composure of the features ; a sense of general lassitude, sleep, suppleness of the skin, freeness of the excretions, and the return of moral sensibility, presage a cure as near at hand. This is perfect, if at the same time that the patient is restored to reason, the habitual evacuations are reëstablished, and the convalescent returns to his former habits and character.

But if sleep, the appetite and excretions, return to their usual state, and

delirium does not lessen, or moral sensibility does not manifest itself in the same proportion; monomania and mania, pass into the chronic state, or degenerate into dementia.

Sometimes insanity terminates, by the predominance of the absorbent system. The patients gain in flesh, and delirium is dissipated in proportion as obesity increases. Obesity continues for several months after the perfect re-establishment of reason; whilst it is a sign of dementia, if the delirium persists. In the opposite class of cases, the patient is cured only after having reached the last degree of emaciation; and only returns to life and reason, after having stood at the portals of death. For thirty years, this last critical termination was denied; it being affirmed, that emaciation was the effect of insanity, and not its critical termination. However, there are many cases of intermittent insanity, whose course renders this mode of termination evident.

Mad'e ***, fifty-one years of age, has had several attacks of insanity, as a result of severe afflictions. Each attack ceases, so soon as the patient becomes lean in flesh.

The intermission continues two years, during which she increases much in size, and when she seems to have attained the maximum of health, delirium suddenly bursts forth, is prolonged for many months, and its intensity lessens. only when emaciation begins. It ceases, only when she becomes very lean. I have often observed similar facts.

M. ***, fifty-four years of age, has had a great number of attacks of mania with fury; each attack lasts from fifteen to twenty days, and its termination announces itself by a great and rapid emaciation, while the return of the attacks occurs only when he has recovered a good degree of flesh.

Galen cites a case of insanity, which was terminated by a quartan fever. Belgarric states a similar fact, in a thesis sustained at the school of Montpelier with this title: "*An in morbis chronicis, febris sit excitanda*"? I have known in several instances, insanity terminated by fevers, either continued or intermittent.

Hippocrates, Celsus, Boerhaave and Lacutus, assure us, that insanity is terminated by hemorrhoids. Frederic Hofmann advised cups to the fundament to provoke them. Epistaxis also, has cured it. The first menstrual eruption is sometimes critical, while the cessation of the menses is a time, truly critical with some insane women. I have known many, who have entirely recovered the use of their reason, on ceasing to menstruate. The re-establishment of the menses, very often terminates insanity. Uterine hemorrhages, leucorrhœa and blennorrhagia, have also produced it. Coition and the spermatic excretion, have been critical. So have gestation and lactation; but I think it unwise, to advise marriage for the cure of insanity.

This means does not succeed so often as is supposed; and sometimes augments the evil.

I have known a great number of monomaniacs, and those afflicted with mania, whose mental state was not improved by pregnancy, parturition nor lactation.

Cutaneous affections merit our attention the more, from the fact that their suppression causes insanity; and because the insane are very subject to them. I shall refer elsewhere to the course of the pelagra, and its peculiar influence upon suicide. Sometimes insanity re-appears, at the same time that tetters appear; whilst more frequently, it ceases only when the tetter disappears; and the cure is not permanent, except when this form of eruption is fixed upon some part.

Hippocrates was of opinion that psora terminates insanity, and all those who have seen much of this disease, coincide with him in opinion. I endeavored to communicate it to a soldier, paralytic and in a state of dementia, in

consequence of a repercussion of this disorder, but succeeded neither in curing him, nor in communicating the disease.

Gardanne pretended, that we could cure insanity, by the inoculation of the small pox. Turuncles, which produce a suppuration more or less abundant, often terminate insanity; whilst eschars, and enormous, but atonic suppurations, never bring it to a favorable issue. Ulcers, whose suppression causes insanity, cure it, by being reëstablished; as art cures, by recalling habitual evacuations, that have been suppressed.

Perfect and Pinel, mention the cure of a maniac, after the engorgement of a parotid. In 1812, there was at the Salpêtrière a woman forty years of age, who, frightened by a thunder-clap, became a maniac. The mania ceased in consequence of an enormous engorgement of the submaxillary glands. This patient fell into a profound stupor, which was dissipated, in proportion as the engorgement of the glands disappeared.

Lafontaine read to the society of Gottingen, the history of an insane person, who was cured, after many years, by the extirpation of a cancer of the breast.

Salivation is a very frequent symptom with the insane. Many make efforts, as if desirous to spit, but without success.

This symptom depends upon constriction of the throat, or spasm of the salivary glands. It happens, however, that salivation is critical, as Perfect and Rolfinck have observed, as well as Pinel and myself.

The discharge of tears offers also the same characters. Many insane persons appear to weep without shedding a tear. The paroxysms often cease, by the shedding of tears, which in some cases, are critical. The return of transpiration, terminates insanity much more frequently than is supposed. It is this, which renders the spring favorable to the cure of this malady; and the tepid baths so useful in the treatment of the insane, whose skin is in a state of remarkable erethysm.

The vomiting of mucous, yellow, black or pitchy matters, and alvine dejections of the same nature, often terminate insanity, especially lypemania. Hippocrates, Lorry and Pinel, have pointed out these terminations, as well as Mead, Selle, and Van Swieten, who have, besides, recorded cures which had taken place after the expulsion of worms. During the year 1811, we had at the Salpêtrière several maniacs, who were cured by the expulsion of worms.

However, I am far from attributing to the presence of worms, that importance in the production of insanity, which Prost gives to it.*

The same is true of the influence which this physician accords to the mucous membrane of the alimentary canal. To conclude from the fact that insanity is terminated by alvine evacuations, that it has its seat in the intestines, is strangely to deceive ones-self.

To conclude also, from the fact that the mucous membrane of the intestines is phlogosed and ulcerated, that insanity has its seat in the intestinal mucous membrane, is equally to deceive ones-self. It is to confound effects with causes. Intestinal evacuations are critical, in a great number of affections, which evidently have their seat elsewhere than in the mucous membrane of the intestines.

In hypochondria, whose seat is so often in the abdominal viscera, we avoid purgatives. We prescribe them in insanity, to provoke a new centre of irritation, to excite the abdominal viscera now fallen into atony, and to expel the accumulated matters from the alimentary canal. The administration of purgatives is not always followed by a cure; indeed, it is often prejudicial.

Phlogosis, and ulcerations of the mucous membrane of the alimentary ca-

* A glance at insanity, Paris, 1807; in 8vo.

nal, prove no more that it is the point of departure in insanity, than that it is the seat of phthisis.

The insane become enfeebled progressively; and tolerant also, of every variety of chronic inflammation. They are scorbutic, and phthisical. A great many of them succumb to marasmus, after having had serous, sanguineous, and purulent evacuations.

How often, on opening a dead body, do we find the mucous membrane of the intestines injected, thickened and disorganized?

We ought to have observed a great number of the insane, to have followed throughout their course, the maladies to which they yielded, and to have compared the results of autopsies, with the symtoms which had characterized the insanity and last malady, before drawing general conclusions.

The different forms of insanity terminate in each other. Thus, mania terminates in dementia, or lypemania; and mania with fury, terminates critically by dementia, when the latter is the product of too active medication, at the commencement of mania or monomania. All forms of insanity degenerate into dementia, after a more or less brief period of time.

There are individuals who, after being cured of insanity, are hypochondriacs and hysterical. I have never known epilepsy cause insanity to cease. In some cases, it unexpectedly succeeds convulsions, which resemble epilepsy; but these convulsions, far from being critical, announce an intracranial lesion, which aggravates the evil, and presages the approaching end of the patient.

I speak not of accidental crises, which can furnish no therapeutic indication, such as falls upon the head, poisoning, cutting the hair, castration and the operation for cataract, which have sometimes brought insanity to a favorable close.

Cannot moral affections, by reacting upon the sensibility, by modifying the sensations, ideas, passions and determinations of the insane, become critical in insanity, of which they are so often the cause? Have not an unforeseen enjoyment, or an unexpected success, caused the gravest maladies to cease? Has it never happened, that a sudden fright, or violent mortification, has terminated maladies, supposed incurable? Do not these troubles, which entirely overcome the moral man, resemble in any respect those tumultuous movements, which precede physical crises?

A young lady is plunged into the profoundest melancholy, because she cannot be immediately married to her lover; she refuses every kind of nourishment, and falls into marasmus. After some months, her lover presents himself to her with an assurance of their speedy marriage. The patient is restored.

An insane person refuses every variety of nourishment. A sense of honor forbids him to eat. After many days, vainly employed in persuading him of his error; to overcome his resolution, they presented to him a false patent, signed *Napoleon*, which commands him to eat, and acquits him of a breach of honor, if he obeys. The patient takes the ordinance, and reads it several times. A moral conflict arises between his convictions, and the order which he has received. After a struggle of many hours, he yields with a groan; eats, and is restored to health.

A young man, in despair that general Moreau had been condemned to exile, persuades himself, that he is destined to avenge this injury, done to the French nation, in the person of its first general.

At Cadiz, whither commercial affairs had called him, he indulges in maniacal acts, wanders about the city armed, requiring himself to be recognized as the chief of the French nation. He is arrested and sent back to France. During the long voyage, M. * takes for a guard of honor, the soldiers who accompany him. He arrives at Paris. Besides his pretensions, the patient persuades himself that one of his relatives,—his most intimate friend,

—has become his most cruel enemy, and is opposed to his elevation and designs. Some months pass in retirement, and the use of an appropriate regimen. At length, after six months, this friend, the object of such intense anger, presents himself. He is assailed with abuse and threats, which do not prevent him, however, from throwing himself into the arms of his sick acquaintance. They remain in each others' embrace for some minutes. Tears flow, the patient turns pale, falls, unable to sustain himself, and is restored to reason, which has ever since maintained its supremacy.

A man of letters goes to drown himself, and is met by robbers. He successfully defends his purse, and returns home, perfectly cured. Do not these facts present the character of a crisis from a violent effort, and a radical change in the sensibility?

But shall we admit the existence of this moral influence, when insanity depends upon the alteration of the humors, or a disorder of every other system but that on which innervation depends?

Why not, when there are no grave lesions in the organs? Moral impressions determine a movement, a kind of shock in the fibres; the forces are modified; and the organs acquire an activity, adequate to the solution of the maladies.

Fear and dread, cause involuntary evacuations, both of the rectum and bladder; anger provokes hemorrhages, and a bilious flux; rage augments the salivary secretions; joy awakens the tender emotions of the heart; mortification causes the tears to flow.

Why refuse to moral affections an influence, in the solution of insanity, when we accord to it, one so powerful, in the preservation of health, and in the production of disease, particularly cerebral disorders?

A lady nineteen years of age, of a sanguine temperament, having never experienced the slightest contradiction, was very choleric and of an extreme susceptibility. Although apparently well, her menses were irregular. At the approach of her menstrual periods, or when she experienced some opposition to her desires, which were always imperious, she became peevish, difficult, and reserved. She complained of head-ache, and of weakness in her limbs. On the slightest provocation she became irritated, and vexed; giving herself up to the blindest acts of anger. She abused her mother and friends, threatens their lives and her own. After each attack of furious anger, Madame *, fell into a state of prostration, but was, at length, restored to a calm state, both of body and mind.

If she sought to control herself, and to restrain the explosion of her anger, she suffered dreadfully in all her members. Her head was puffed up, her face injected, and her eyes gorged with blood; and this condition was relieved, only by the occurrence of a paroxysm.

Does not this observation, whose details will find a place elsewhere, strengthen our opinion, respecting the moral crises of insanity? This opinion is confirmed, by the salutary effects which are obtained from moral agencies, in the treatment of mental alienation. Here, as in the physical treatment, the physician can only imitate nature, and second its tendency, towards this or that solution.

The study of the critical terminations of mania, conduct us naturally to considerations respecting the curability and mortality of this malady.

TABLE OF CURES. No. VIII.

England.	*Admissions.*	*Cures.*
Bedlam hospital, from 1748 to 1794,	8874	2557
" " in 1813,	422	204
St. Luke's hospital, from 1751 to 1801,	6458	2811
York hospital,	599	286
Retreat near York, from 1801 to 1814,	163	60
Totals,	16516	5918
France.		
Charenton, from 22d Nov. 1798, to 22d July, 1800,	97	33
Do. in 1803,	499	161
Salpêtrière, 1801 to 1805,	1002	407
Do. 1804 to 1813,	2005	1218
My own Establishment from 1801 to 1813,	335	173
Totals,	3938	1992

TABLE OF CURES OBTAINED AT THE SALPETRIERE DURING TEN YEARS.

Number Admitted.	*Years.*											*Totals.*
	1804	1805	1806	1807	1808	1809	1810	1811	1812	1813	1814	
209	64	47	7	4	3	2	0	1	1	0	0	129
212	—	73	54	4	2	2	1	0	0	0	1	137
206	—	—	78	49	10	3	1	1	1	0	0	143
204	—	—	—	60	55	11	1	0	2	0	0	129
188	—	—	—	—	64	57	4	2	1	0	2	130
209	—	—	—	—	—	48	64	9	4	1	3	129
190	—	—	—	—	—	—	48	51	7	1	3	110
163	—	—	—	—	—	—	—	44	30	8	3	85
208	—	—	—	—	—	—	—	—	75	41	11	127
216	—	—	—	—	—	—	—	—	—	50	49	99
2005												1218

From the reports made in different establishments or hospitals for the insane, we conclude: 1, that the absolute cures of the insane are about one third.* 2, that the number of cures varies from a fourth to a half. This difference depends upon the peculiar circumstances, of locality, maladies, and treatment. 3, that the cures are more numerous in France than in England, (they are much more rare in Germany and in Prussia). Thus, whatever display the English may make of their success in the treatment of the insane, we can oppose to it still greater success in France.

* In the establishment of Ivry, we enumerate among 529 insane of the two sexes, not paralytic, 263 cures=1 to 2.01.

A word of information this to such of my countrymen, as think that *the better*, must be always among strangers.

It is not sufficient to determine the number of cures. It is of importance moreover, to ascertain the duration of mental alienation, or of its treatment. It is with this view, that I have arranged the second table, embracing a list of cures during ten years.

The first column presents the number of admissions, a deduction being made of the incurables; the horizontal lines, indicate the cures of each year; the second vertical column indicates the total number of cures.

I have constantly observed, that in the course of the first month of the disease, a strikingly marked remission takes place. The insanity, which, up to that period, had an acute and violent course, seems to have reached its close; and it is, at this time, that it seems to pass into a chronic state, because the crisis is incomplete.

Ought this remission, which I have observed with the greatest care, to be attributed also to the symptoms which complicate insanity at its commencement? It is often during the first month, that we obtain the greatest number of cures, when compared with the following; a fact which confirms the correctness of the Memoir, read by Pinel before the Institute in 1806.

The mean term of the duration of insanity has been fixed in this memoir, at between five and six months. M. Pinel has excluded from the estimates which led to this result, all those who had been elsewhere subjected to treatment, as well as those whose insanity was of long standing. Mr. Tuke gives a greater extension to the duration of insanity, in the account which he renders, of the Retreat near York. Our data oblige us to range ourselves in opinion with the latter. I was led to this conclusion, by making up the report of the insane women, admitted at the Salpêtrière, during ten years. This report extends from 1804 to 1813. There were received, during this period, two thousand eight hundred insane women. Seven hundred and ninety-five were regarded as incurables, in consequence of their age, or because they were imbeciles, epileptic or paralytic.

Two thousand and five were put under treatment, without reference to the duration, or character of their insanity. Of this number, six hundred and four were cured during the first year, five hundred and two the second, eighty-six the third, and forty-one in the seven following years; whence we may conclude, 1st, that we obtain the greatest number of cures during the first two years; 2d, that the mean term of cures, is a little less than one year; 3d, that after the third year the probability of a cure is only as one to thirty. There are however examples, which prove that we ought never to despair of the cure of the insane.

Pinel, after Baumes, cites the memorable example of a lady, who had passed twenty-five years in a state of mania, as was known to a whole province, and who suddenly recovered her reason. I knew a girl who, for ten years, was in a state of dementia, with suppression of her menses. One day on rising, she runs to embrace her mother; saying, "oh! mamma, I am cured"! Her menses had just commenced flowing spontaneously, and reason was immediately established. But these cases are rare.

They prove, that when there are no marked indications of incurability, or when no physical disorder exists, we may hope, that at length, insanity will cease. I have seen it twice terminate at the critical period, with two women, who had been insane, and even in maniacal dementia from their earliest youth. There was at the Salpêtrière, while I was physician at that hospital, a woman who had become insane at her first menstrual period, and who was cured at forty-two years of age, at the disappearance of the menses.

The greater number of cures are obtained in spring and autumn.

The age most favorable for cure, is from twenty to thirty years. Passed fifty years the cures are rare.

Mania and monomania, are much more frequently cured than lypemania. We never cure idiocy nor senile dementia. Chronic dementia is rarely cured. Mania is cured more promptly than lypemania. There are many insane persons, who can be restored only to a certain point.

Those individuals retain such a degree of susceptibility, that the slightest causes provoke relapses, and they preserve their reason only by being removed from society, to a place where no moral shock, no disquietude, no event exposes them to relapse into their former condition. There are others, whose brain, and consequently the reason, has experienced such a shock, that they can no more act the part which they were formerly accustomed to perform in society.

They are very rational, but do not retain mind enough to be military characters, to conduct their commercial affairs, or to control successfully their private business. We may estimate these individuals, at one twentieth of the number, who recover their reason.

The greater part of the insane retain a painful recollection of their malady. They are often ungrateful for the attentions which they have received, because they imagine that they are despised on account of their malady, and that they have been removed from society, isolated, and treated at an improper time. This phenomenon, which has been noticed by the ancients, and which is usually very marked during the earlier periods of convalescence, is dissipated by degrees, and disappears at length, when the individuals have recovered their full measure of health.

Almost all the insane, even maniacs, have a recollection of their ideas, illusions, false judgments, and affections, whatever may have been the disorder of their intelligence.

When they become convalescent, they render a very good account of their illusions and hallucinations; of their repugnances, and aversions; of their preferences, and obstinacy; in fine, of the motives of their determinations and acts.

They determine with great accuracy the epoch of the cessation of the delirium. They indicate the causes that have produced it, or the symptoms that have signalized it. They appreciate the attentions that have been paid them, the good or the evil that they have done, and the errors or faults, which they have committed during the existence of their malady. Insanity is not, therefore, attended by loss of consciousness, for the insane man often preserves the recollection of his condition.

Many melancholics and even maniacs, have a perfect knowledge of all their discourses, and of all their actions, and after their cure, they relate with surprising exactitude, what they have done, said, or thought. Many, in consequence of the recollection which they preserve of these things, dare not appear in public, to renew their former relations, fearing that in entering into the world, they shall become objects of curiosity, of commisseration and distrust, which wounds their self-love and humbles them.*

* I have reported, in the "Annals of public hygiène and legal medicine," 1836, t. XVIth, page 197, the psychological condition of a hypochondriacal lady, from extracts of letters which were addressed to me by the patient. All the symptoms which this lady experienced, were set forth, and analyzed by her, with remarkable correctness.

In the same volume of the Annals, may be found a memoir of Doctor Bergmann, where are recorded the reflections of a person who, having been afflicted with mania, relates all that he experienced during his sickness.

M. Leuret, in his "*Psychological Fragments on Insanity*," Paris, 1834, in 8vo. p. 25. has published the history of a maniac whom he saw at Ivry; a maniac, who could re-

It is not uncommon, that individuals who are regarded as cured by their relatives and even physician, are not entirely so.

They reason perfectly well, have returned to their former habits and mode of living, and even discharge important duties, whilst there still remains something peculiar, strange and unnatural.

A gentleman, whose malady had been characterized by hallucinations of hearing, although perfectly restored to reason, experienced still the same hallucinations. But this symptom was fugacious, and the convalescent very well understood the cause of it. It persisted for four months.

M. N. had been cured of lypemaniacal mania, had returned to his family, and been appointed to distinguished trusts, the duties of which he fulfilled in a remarkable manner.

For a year, he was unwilling to turn his attention to an estate, in which he was much interested, to correspond with reference to it, to admit of conversation on the subject, or to permit his wife and children to visit it. It was on this estate, that his delirium had first burst forth, with the greatest violence.

A lady, cured apparently of an attack of suicidal lypemania, with paroxysms of mania, passes a month in Paris, to divert her mind, and confirm her convalescence. She then returns to her family, and all her former habits. Every one is convinced of her perfect restoration to health.

A year after, her husband was seized with an alarming attack of apoplexy. The grief she experienced in consequence of it, produced a profound impression upon her mind, which resulted in her cure. Up to this period, she had led a very retired life, with irrational notions, from which, the care she had taken of her children, to prevent the effect, which their untimely death would have produced upon the mind of their father, alone relieved her.

Mad'e N., after having been distressed for many months, by a gloomy and insane jealousy, which had impelled her even to wish to destroy her children, was unwilling to see them for eight months after her apparent cure, although enjoying the perfect use of her reason, and restored to society, where she was distinguished, as well by her wit, as her extraordinary personal charms.

The cases which I have above reported, prove to a demonstration, that we cure a greater number of the insane than formerly. But the relapses! the relapses are so frequent! is repeated on all sides.

So true is it, that it is as difficult to dissipate apprehension from the mind of man, as to establish hope in his breast. We must not confound relapses, with new attacks of insanity.

Of two thousand eight hundred and four insane persons, treated at the Salpêtrière, two hundred and ninety-two were there, for a second or third attack. We may thus conclude, that one tenth of the cases are relapses. Among the wealthy, relapses are less frequent; without doubt, because they have more means at their control, and a greater desire to avoid the causes of a relapse, while the misery and indifference of the poor, expose them to the action of every malign influence.

Physicians know well, that those who have had fevers, the phlegmasiæ, etc. are, more than others, exposed to a recurrence of the same maladies; because an organ, once affected, is, from this circumstance, more disposed than another, to be affected anew in the same manner.

We give not the title of relapse, to a recurrence of these maladies. Why give it to a new attack of insanity? Do not all hospital physicians see frequently returning to their wards, the same individuals, and for the same causes?

call, two days after he had uttered them, words altogether incoherent, and which a man, enjoying the use of his reason, unless endowed with an extraordinary memory, would have found great difficulty in recollecting.

They consider themselves as about to treat a new malady, and not a preceding one, that had been cured.

I do not deny, that the insane are subject to relapses. They are perahps more exposed than other classes of patients; because the exciting causes of insanity are numerous, and appear every where, and in all the circumstances of life; because the crises of this malady are less complete; and because individuals who have been cured, are less cautious in guarding themselves against accidents, which have produced their former attacks.

But because men are imprudent, ought we to censure the impotence of medicine? I add, that relapses are often foretold; and that they might, frequently, have been prevented.

Greding, Monro, and Crichton, are of opinion, that the insane are not long lived, even those who have recovered the use of their reason. To a certain extent, I participate in this opinion; but I do not go beyond them, as Doctor Andrè has done in a German Journal.

In opposition to this afflictive decision, experience proves, that many insane persons lead a long life. It is not rare to find in hospitals, insane persons who have lived there twenty, thirty and forty years.

The mortality of the insane presents several interesting considerations, although neglected hitherto. It ought to be studied with reference to the number of the insane, to the season, age, sex, and form of insanity; to the malady under which the patients succumb, and to the appearances presented on dissection.

The mortality of the insane, like their cure, depends upon many local circumstances.

Both one and the other are modified by the position, and general arrangements of the place in which they are treated; by the direction, supervision, and regimen; as well as by the variety of patients received at the establishment. The mortality must be more considerable, and the cures less frequent, when we have to treat every form of insanity. Thus, the tables of mortality, published by the physicians of London and York, are the more favorable, because they receive at those hospitals those individuals only, who offer the most favorable indications for a cure, and consequently, most widely removed from mortality: whilst at the Salpêtrière, Bicêtre, and Charenton, more than one third of the insane admitted, come to terminate their existence at these hospitals. We must also take notice of the accidental circumstances which modify the mortality. Thus, we have observed at the Hôtel-Dieu of Paris, that when the small pox was epidemic, a greater number of the insane died.

In 1793, scarcity augmented the mortality among the insane at the Bicêtre (Pinel).*

The mortality is greater in autumn and winter, as the following table (page 68) proves; whilst in spring and summer it is less. In the latter seasons, the means of preserving life, concur in warding off dangers. The insane are less confined than in winter; they take more exercise; partake of fresh vegetables; and are more cheerful and gay.

Thus, spring is doubly favorable to the insane; since a greater number are cured, and less die than at other seasons; a consideration, which furnishes a valuable indication for the direction of the insane, and a strong objection to debilitating treatment.

We have seen that the age most favorable to the production of insanity, is from twenty-five to thirty-five years, for both sexes. The same is not true of their mortality.

* In 1832, the cholera having invaded the division of the insane at the Bicêtre and Salpêtrière, the mortality among this class, at the two hospitals, was more considerable than usual. This scourge spared the hospital at Charenton.

This is highest for the two sexes from thirty to forty years, while that of women is highest from forty to fifty years; and that of men from thirty to forty. It is higher among women than men, from sixty years and upwards. It results, therefore, from the table above referred to, that the mortality of the insane takes place at an earlier period among men, and is far greater at an advanced period of life, among women.

We ought also to take notice of the treatment, in order correctly to appreciate its effects. The mode of treatment adopted at the Hôtel-Dieu, rendered the mortality of this hospital greater than it is at present, at the Bicêtre and Salpêtrière.

At Marseilles, Raymond found the mortality of the insane to be as one to fourteen.

Tenon, at Paris, in 1786, fixed it at one to eleven.

Pinel, setting aside cases of senile dementia, estimates it at one to twenty or twenty-three.

I believe that it is higher. It is as one to six or eight.

But to have more precise ideas on the subject, we must consider it, with reference to the various forms of insanity.

My records furnish the following:

Mortality in mania, one to twenty-five.
Mortality in monomania, one to sixteen.
Mortality in lypemania, one to twelve.
Mortality in dementia, one to three.

Imbeciles and idiots are never cured, but some of them live a long time. It is rare, however, that they survive their thirtieth or fortieth year.

Accidental acute mania is rarely fatal; simple lypemania, even that which is characterized by an impulse to suicide, is mortal only when it depends upon an organic lesion, or is complicated with scrofula, phthisis and paralysis. The patients then fall into marasmus, (tabes melancholica of Lorry), and die.

Dementia, being the termination of all forms of mental alienation, is most commonly fatal. It is often complicated with paralysis; and it is this complication, which renders the mortality of the Bicêtre and Salpêtrière, so much greater, as they are the receptacles of every form of insanity. The mortality of the insane is greater during the first two years after the invasion of the malady, than the following. It is greatest during the first year after their admission, among our women at the Salpêtrière.

These considerations lead us to the study of those maladies to which the insane succumb.

Those which most frequently terminate the existence of the insane, are inflammation of the meninges, cerebral fever, apoplexy, organic lesions of the brain, and of the thorax or abdomen.

We may estimate two eighths of encephalic affections, (excepting epilepsy and paralysis from the number of maladies which destroy the insane), two eighths of disorders of the thorax; and three eighths of abdominal complaints, comprising among them, colliquative diarrhœa; and marasmus without organic lesion.

Monro, on the authority of the aphorisms of Greding, assures us that marasmus and dropsy of the chest occasion the greatest amount of mortality among the insane. The examination of about six hundred bodies of the insane, has not led me to this conclusion. On the contrary, diseases of the thorax are less numerous than those of the abdomen.

Does this difference depend upon climate and mode of living, or upon the mode of treatment employed to combat the disease?

A slow, nervous fever, often terminates lypemania. Some lypemaniacs refuse all motion. At one time they are unwilling to leave their bed; at another, they insist upon sitting on the ground. Some obstinately refuse every kind of

aliment; others eat with frightful voracity. They seem to take a pleasure, in braving whatever can destroy their organization. They waste away. Their skin becomes earthy. They fall into a state of extreme debility. A paroxysm of fever returns at every evening. A diarrhœa often supervenes, and hastens their doom.

Phthisis, which complicates insanity, and more particularly lypemania, has been observed by Mead and Lorry.*

In a great many cases of insanity, I have known lypemania and even mania, preceded by many months, by phthisis, or appear at the same time with it. These cases of phthisis, escape the notice of the most careful observers. The patients become more and more feeble; fall into marasmus, and a slow fever; attended sometimes with cough, and diarrhœa. At length they die. The delirium, far from ceasing, augments, even to the end.

At the opening of the bodies, we find the lungs tuberculous, suppurating, and sometimes with vomices. Melanosis of the lungs is not rare. The intestines, almost always, present traces of inflammation and gangrene; as well as suppuration of the crypts of the mucous membrane.

It might be supposed that organic lesions of the lung existed, because the insane cry and use this organ in their vociferations. It is not so; since phthisis is generally observed only among lypemaniacs, who never vociferate.

Hippocrates informs us in the Coacs, that the *phrensy* which supervenes upon pleurisy, is fatal. Sometimes also, insanity alternates with phthisis, and while the delirium lasts, even in its most violent form, the symptoms of phthisis cease to appear.

Scurvy is still one of the most frequent complications of mental alienation. It is often a result of insanity, of the insalubrity of the habitations, of the want of exercise, and the bad regimen of the insane.

The scorbutic belonging to this class are either lypemaniacs, or in a state of dementia, and very often paralytic. It manifests itself by yellow, brown, or black spots upon the members, and the gums are fungous. These patients are seized with a serous and sometimes sanguinolent diarrhœa; the extremities become œdematous; pains and spasms of the stomach supervene; and the face is pale, and swollen.

Eschars upon the sacrum, heels, the malleoli, trochanters, and elbows, involuntary and serous dejections, and syncopes, presage approaching death.

On opening the bodies, we find serous effusions in the head, and the brain is infiltrated. The heart is flaccid, and often the capacity of the pulmonary ventricle, and particularly that of the right auricle, is augmented. The gall bladder is full of black and viscid bile. The spleen, more or less voluminous, is reduced to a condition resembling the lees of wine. The mucous membrane of the intestines is injected, and coated with a brown, sanguinolent mucosity. The muscles, pale and discolored, are torn with the greatest facility.

Half of the insane, whatever may be the character of the delirium, but more particularly monomaniacs who die, are paralytic.

These individuals suffer more or less embarrassment, in the articulation of sounds; though their minds are sometimes but slightly deranged, at the commencement of the malady. After some months or a year, if they have not gained in flesh, they become very lean, grow feeble, walk with difficulty, and incline ordinarily to the left side. The dejections become involuntary, without being more liquid. There is incontinence of urine; embarrassment of speech increases; and the vital forces diminish, although they may take exercise, and the appetite be voracious.

From the time that they take their bed, gangrenous eschars form at the coccyx, or the trochanters, heels and elbows. This humid gangrene makes rapid progress, and the bones are soon denuded. Fever sets in. Epileptiform

* De melancholia et morbis melancholisis, Parisiis, 1763, t. I. p. 385.

convulsions supervene; the members are livid, and very cold; the pulse is no longer perceptible, and the patients die.

I have pointed out these two terminations, because I have very often observed them.

Apoplexy is still one of the maladies which terminates the life of the insane. Of two hundred and seventy-six individuals, thirty-seven died apoplectic. Pinel the elder, has noticed this variety of sudden death, by which some maniacs and monomaniacs are overwhelmed, particularly during the winter. Aged persons are more exposed to it than the young. Suddenly, the most violent fury, and the wildest delirium cease; and in a few moments the patient dies. It would seem that all the vital forces had been exhausted, by the excess of maniacal excitement.

I had in charge an old man seventy-two years of age, dry and lean, who, for three months, was in a constant state of agitation and delirium. He comes out of this state, and in the calmest tone, asks his servant for his snuff box, takes from it a pinch of snuff, and expires.

Putrefaction of the body speedily ensued, and the interior of the cranium presented no alteration. M. ***, forty-three years of age, of a dry temperament, suffered for a month, from an attack of delirium, with fury. On the thirty-first day, we noticed that he was pale. He asks to sit down, and expires. I found in the duplicature of the falciform fold of the dura mater, an osseous, pisiform substance about three lines in diameter, depressing the corresponding convolution of the brain. In other cases I have found nothing.

TABLES RELATING TO THE MORTALITY OF THE INSANE.

No. 1. Mortality relative to admissions.

	Admissions.	*Deaths.*
Bicêtre, from the year 1784 to 1794,	1405	685
Salpêtrière (Pinel), from 1801 to 1805,	1002	250
Charenton, during the year 1803,	499	82
Salpêtrière, from 1804 to 1814,	2804	790*

No. 2. Mortality relative to Seasons.

During the ten years, from 1804 to 1814, the 790 deaths at the Salpêtrière, presented the following proportions, relative to seasons:

March, April, May,	175
June, July, August,	174
September, October, November,	234
December, January, February,	207
	790

Mortality with respect to Age.

I have here compared the mortality of men with that of women, relative to age, during an equal number of years, and from a nearly equal number of deaths, of the two sexes.

Bicêtre; Men, from 1784 *to* 1794.		*Salpêtrière; Women, from* 1804 *to* 1814.	
20 years,	25		58
30 "	176		83
40 "	215		143
50 "	134		173
60 "	90		123
70 " and above,	45		210
	685		790

* The 790 deaths at the Salpêtrière, from 1804 to 1814, relative to admissions, took

TABLE OF MORTALITY

At the Salpetriere, during ten years.

No. of admissions each year.	*Years.* 1804	1805	1806	1807	1808	1809	1810	1811	1812	1813	*Totals.*
271	46	21	15	8	1	6	2	1	1	1	102
301	—	48	29	16	7	2	4	1	0	2	109
292	—	—	49	22	9	2	1	4	2	1	90
297	—	—	—	64	25	3	2	2	4	1	101
252	—	—	—	—	35	23	8	1	3	1	71
299	—	—	—	—	—	35	31	7	3	1	77
260	—	—	—	—	—	—	30	22	9	3	64
233	—	—	—	—	—	—	—	26	20	9	55
301	—	—	—	—	—	—	—	—	23	10	33
298	—	—	—	—	—	—	—	—	—	26	26
2804											728

Those who died during this period, but who were admitted before 1804, 52

Total, ... 780

List of Diseases, which terminated the existence of the Insane.

Adynamic fever	32
Ataxic fever,	14
Cerebral fever,	28
Slow nervous fever,	25
Pleurisy,	12
Phthisis,	28
Latent Peritonitis,	13
Colliquative diarrhœa, Scurvy,	38
Hydropericonditis,	11
Scirrus of the pylorus,	4
Organic lesions of the liver,	35
Apoplexies,	33
Epilepsies,	4
Total	277

We are now naturally conducted to the post mortem examinations of the insane.

From this announcement, every one doubtless expects, that we are about to point out the seat of insanity, and to make known the nature and seat of the organic lesion, of which insanity is the expression.

This we are by no means to accomplish. The examinations of the dead have, to the present period, been barren of practical information.

The facts observed by Willis, Manget, Bonet, Morgagni, Gunz, Meckel, Greding, Vicq-d'Azyr, Camper, Chaussier, Gall, etc., have produced only negative, or contradictory results.

These distinguished observers had but few subjects submitted to their researches.

All the labor that has been expended upon the anatomy of the brain, has produced no other result, than a more exact description of this organ, and the

place in the following proportion; 382, during the first year, 227, the second, and 181, during the seven following years.

despairing certainty, of our being forever unable to assign to its parts, the uses from whence we may derive information, with reference to the exercise of the thinking faculty, whether in health or disease.

Before drawing any conclusions, from those organic lesions observed among the insane, will it not be well to acquaint ourselves with all the varieties, both of the cranium and brain, which are compatible with the integrity of the faculties of the understanding?

Would not this be the true point of departure, for all our pathological researches?

Now, says the learned Chaussier, there is no organ in which we find greater varieties, with respect to volume, weight, density, and in its respective proportions, than in the brain.*

Have we carefully distinguished the results of concomitant maladies, or those diseases which terminate the life of the insane, from those which belong to mental alienation?

Organic lesions of the brain reveal themselves by other signs than insanity. Thus, chronic inflammation of the meninges produces compression, which reveals itself by paralysis; cerebral hemorrhage is also manifested by paralysis. Tubercles, cancers, and softening of the brain, present peculiar characters, which cannot be confounded with mental alienation.

Have we reflected on the sudden and instantaneous cures of insanity? It is in consequence of having neglected these considerations, that we reason so erroneously respecting the seat of this malady. The minute and detailed description of the alterations, and organic lesions, observed in the post-mortem examinations of the insane, would be too long, and the less necessary, as they offer nothing of a satisfactory nature.

In treating upon mania, monomania, etc., I shall speak of the examinations made upon the bodies of those who have died while suffering from these various forms of insanity.

I shall in this place content myself with giving the conclusions which I have been able to draw, from post-mortem examinations hitherto made.

I do not pretend, that they are mathematically exact; but that they are in the main correct, with respect to the facts observed.

1. Vices of conformation in the cranium, are met with, only among imbeciles, idiots, and cretins.

2. Organic lesions of the encephalon and its envelopes, have been observed only among those whose insanity was complicated with paralysis, convulsions and epilepsy; or rather, these lesions appertain to the malady which has caused the death of the patients.

3. The sanguine or serous effusions; the injections, or infiltrations, which we meet with in the cranial cavity; the thickening of the meninges; their adhesions among themselves, with the cranium and the gray substance; the partial or general softening of the brain; the density of this organ; the fibrous, knotty, and cancerous tumors, observed within the cranium; all these alterations indicate either the causes, or effects of insanity; or rather the effects of a complication, to which the patients have yielded.

4. The alterations within the thorax, abdomen and pelvic cavity, are evidently independent of insanity. These alterations may, nevertheless, indicate the source of mental alienation, by showing the organ primitively affected, which has reacted upon the brain.

5. All the organic lesions observed among the insane, are found to exist among those, who have never suffered from chronic delirium.

6. Many post-mortem examinations of the insane, have revealed no alteration, although the insanity may have persisted for a great number of years.

* A brief exposition of the structure and parts of the encephalon. Paris, 1807, in 8 fig.

7. Pathological anatomy, shows us every part of the encephalon, altered, in a state of suppuration, and destroyed, without chronic lesion of the understanding.

8. From the above data, we may conclude, that there are cases of insanity, whose immediate cause escapes our means of investigation; that insanity depends upon an unknown modification of the brain; that it has not always its point of departure in the brain, but rather in the foci of sensibility, situated in different regions of the body; as disorders of the circulation do not always depend upon lesions of the heart, but upon those of some other portion of the vascular system.

This conclusion will be opposed to those who pretend, by the character of the delirium, to be able to point out that portion of the brain which is disturbed: it will be opposed to those who believe that there is an *ideal insanity*, a form, which I must confess my inability to comprehend; as well as those to which they give the appellation; *intellectual insanity; insanity* of the *mind.*

I am not more fortunate, in understanding the various systems that have been devised, for explaining the delirium, and the symptoms of mental alienation.

Happily, this information is not indispensable to the cure of the insane.

Let us study the causes, character, course, and terminations of insanity: let us endeavor rightly to appreciate the influence of physical, moral and intellectual agents, over this disorder, and we shall discover the means, suited to combat it.

To cure insanity, it is no more necessary to understand the nature of it, than it is to know the nature of pain, to employ successfully, calming and sedative remedies.

IV. PROGNOSIS OF INSANITY.

In establishing the prognosis of insanity, it will be necessary to keep before the mind, the signification which I have given to the five forms into which I have divided it. Otherwise, I shall be found opposed to those with whom I concur in sentiment.

Imbecility and idiotism are never cured.

Monomania and lypemania are cured, when they are recent, accidental, and do not depend upon an organic lesion.

Mania is cured more frequently than monomania and lypemania.

Acute dementia is sometimes cured; chronic dementia very rarely; senile dementia, never.

Hereditary insanity is cured; but relapses are more to be feared, than in accidental insanity.

Chronic insanity is cured with difficulty, especially after the second year. This difficulty is proportioned to the time that the predisposing causes have been operating on the system, prior to the outbreak of delirium.

Whatever may be its duration, we may hope for the cure of mental alienation, so long as marked, yet curable derangements exist, in the functions of nutrition.

Moral causes, which have acted suddenly, constitute a circumstance in favor of a cure; but if their operation has been slow, a cure is effected with difficulty.

Excessive study, when it produces insanity, may well occasion doubts respecting a cure; especially when with these excesses are connected errors of regimen.

Insanity, which is caused or continued by religious notions, or by pride, is rarely cured.

Insanity, maintained by hallucinations, is cured with great difficulty.

That form of insanity in which the patients are aware of their situation, presents many difficulties, if not promptly cured.

When the insane have recovered the integrity of the assimilative functions, appetite, sleep, flesh, etc., without any diminution of the delirium, we have little reason to expect a cure.

When the sensibility of the insane is so much enfeebled, that the presence of the sun does not affect them; that they lose the senses of taste and smell; and remain unaffected by excesses of whatever kind, they can never be cured.

Insanity is incurable, when it is the result of scurvy or of epilepsy. Its complication with these maladies and with paralysis, leads to inevitable death.

V. TREATMENT OF INSANITY.

It is, doubtless, less difficult to establish systems, and to imagine brilliant hypotheses respecting mental alienation, than to observe the insane, and put up with the disgusting circumstances of whatever kind, to which those are exposed, who would, by observation, study the history of this most serious infirmity.

The difficulty of catching the varied and fugitive forms of insanity, the savage rudeness of certain monomaniacs, the obstinate silence of some, the scorn and abuse of others, the threats and blows of maniacs, the disgusting filthiness of imbeciles, together with the prejudices which aggravate the lot of these unfortunates, have discouraged those who wished to cultivate this branch of the healing art.

They shun the maniacs. They fear them, and leave them in their chains.

Monomaniacs are a little less neglected. They submit more readily to observation. Their delirium is more amenable to theories and explanations.

But we must live with the insane, in order to obtain exact notions respecting the causes, symptoms, course, crises, and terminations of their malady. We must live with them, in order to appreciate the infinite cares and numberless details, which their treatment requires. How great the good which the patient derives from friendly and frequent intercourse with his physician! How valuable the lesson, which the latter acquires, relative to the influence of the physical over the moral man, and reciprocally!

In the gestures, movements, looks, and general aspect; in his proposals, actions, and shades of conduct which are imperceptible to others, the physician often derives his first thought, respecting the treatment which is suited to each patient committed to his care.

Mental alienation offers three orders of phenomena, whether we study the causes which produce it, or the symptoms which characterize it.

We have seen physical as well as intellectual and moral causes, acting upon the brain, sometimes individually, sometimes collectively, produce insanity. These causes have, now a general, now a local action; now primitive and immediate; now secondary and sympathetic. Their action varies with the individual cases, and their effects are diverse, and even opposite.

We have seen physical disorders as well as moral and intellectual, marking all the periods of the malady, in degrees, more or less intense. We have sometimes seen nature herself, bear the whole burthen of a cure, and restore the patient to health, by means that had escaped the most practiced observers. Generally, mental alienation is terminated by sensible crises. It is not rare to witness surprising cures, which are produced by moral influences, either accidental, or otherwise.

Thus, in a general view of the treatment of the insane, we should propose

to ourselves, the removal of physical disorder, the aberrations of the understanding and the disturbance of the passions.

We must, therefore, skillfully control the mind and passions, and make a suitable use of the physical means, which ought to be employed in the treatment of the insane. We must never lose sight of the causes which have predisposed to, and provoked insanity; nor by any means forget the habits of the patient, and the sickness which existed, previous to the appearance of mental alienation, and which ceased a little before, or at the moment of the attack.

Among the ancients, the treatment of insanity was made to consist in the use of hellebore.*

An accident was the means of proposing the bath of surprise. The discovery of the circulation of the blood, caused physicians to bleed largely. The humorists returned to the use of purgatives. The English vigorously employed the precepts which Areteus and Cœlius had suggested, and of which Erasistratus and Gallienus had made a most happy application. They made a secret of them; but Pinel made himself master of it, and changed the lot of the insane. The chains were broken,† the insane were treated with humanity, hope gained hearts, and a more rational system of therapeutics, directed the treatment.

It will often be necessary to vary, combine and modify the means employed; for there is no specific treatment of insanity.

As this malady is not identical in every case; as in every instance it depends upon different causes, and presents varied characteristics, and requires new combinations; a new problem is to be solved, for every patient whom we are called to treat.

I will limit myself to general considerations, which are adapted to all; and will set a due value upon certain medicaments, denominated heroic.

In the study of symptoms, we have seen that the lesions of sensations, together with that of the association of ideas, and of the will, caused by defective attention, produced, and kept up the delirium, as well as the perversion of the passions.

Whatever can act upon the brain, either directly or indirectly, and modify the principle of thought; whatever can control and direct the passions, should be the object of moral treatment.

The first question that presents itself, is relative to isolation. Ought every insane person to be removed from all familiar scenes, his mode of life changed —separated from those with whom he has always lived,—placed in a situation altogether new, and committed to the care of strangers?

The English, French, and German physicians, agree with respect to the necessity and utility of isolation.

Willis, who was so long known, and sought for, in consequence of his success in the treatment of insanity, was accustomed to remark, that foreigners were with more certainty cured, than the English. The same is true in France.

The cures are more frequent among those patients who visit Paris from abroad, than those who reside at the capital. The latter are not sufficiently isolated.

The first effect of isolation is, to produce new sensations, to change and break up the chain of ideas, from which the patient could not free himself.

New and unexpected impressions strike, arrest, and excite his attention, and

* Article Hellebore; Encyclop. Method. by Ph. Pinel.

† *Bicêtre in* 1792, *or the abolishment of chains* (Memoirs of the Royal Academy of Medicine, Paris, 1836, t. v. pag. 31.)

render him more accessible to those councils, that ought to bring him back to reason.

Besides, from the moment that an insane man is shut out from the world, surprised, astonished, and disconcerted, he always experiences a remission, of great value to the physician, who then, finding the patient without prepossessions, can more readily acquire his confidence.

Isolation is not less useful, in combating the disorder of the moral affections of the insane. The disturbance unexpectedly occurring in the nervous system, changes the nature of the sensations, and often renders them painful. The natural relations with the external world are no longer the same. Externally, every thing seems to be thrown into confusion. The patient who believes not that the cause of these phenomena is within himself, is at variance with all that he either sees or hears; a circumstance which excites his mind, and places him in opposition to others and himself. He persuades himself that his friends wish to oppose him, since they disapprove of his errors and excesses. Not comprehending fully what is said to him, he most frequently misinterprets the language which is addressed to him:—proofs of the tenderest affection are regarded as injuries, or as enigmas which he cannot solve:—the most devoted attentions are vexations:—his heart, ere long, nourishes only distrust.

The insane man becomes timid and suspicious. He fears every one that he approaches; and his suspicions extend to those who were most dear to him. The conviction that every one is endeavoring to torment and slander him, to render him miserable, and to ruin him, in body and estate, put the finishing stroke to this moral perversion.

Hence that *symptomatic suspicion*, which often grows up without motive; sometimes, in consequence of necessary opposition, which increases by reason of the alteration of the intellectual faculties, and which is depicted so strikingly upon the physiognomy of the insane.

With such moral dispositions, leave an insane person in the bosom of his family, and immediately this tender son, whose happiness once consisted in residing at home, will desert the paternal mansion. The despairing lover hopes, by his counsels, to bring back the wandering reason of her whom he adores. Her unfortunate condition renders the blow only the more severe.

She who once loved him so tenderly, will now see in him only a wretch, who offers his attentions, only the better to betray.

This friend, whose heart is weighed down with grief, hopes, by his affectionate attentions, to restore that sensibility and reason, which had been the source of his attachment and happiness.

But soon, unhappy one, thou wilt be embraced in the general proscription; and thy cares for thy suffering friend, will be but proofs, that thou also hast yielded to the corrupting influences of his enemies.

What are we to hope for, if we change not the moral condition of that unfortunate class, whose prejudices are so strongly excited?

Who of us has not experienced the difference which exists, between being deceived, thwarted and betrayed, by his neighbors and friends, and by those who are strangers to him?

This unfortunate man, suddenly becomes master of the world, gives out his sovereign orders, to all who surround him. He pretends to be blindly obeyed, by those who had ever yielded to his wishes, through respect or affection. His wife, children, friends and domestics, are his subjects. They have always obeyed; will they now dare to be disobedient? He is in his dominions, and commands, a despot; and he is ready to punish with the greatest severity whoever shall dare to make the least remonstrance. What he wills is impossible; suppose it is, he wills it; and shall the will of the great be met by insurmountable obstacles? The affliction of his family, the regrets of his

friends, the agitation of all, their deference for his wishes and caprices; the repugnance of every one to oppose him through fear of exasperating his madness; do not all these serve to confirm this wretched man in his notions of power and domination? Remove him from the seat of his pretensions:—take him from his home. Stripped of his empire and subjects, he will collect his thoughts, direct his attention to the study of himself in this new world, and to the establishment of relations with those around him.

The cause of mental alienation often exists within the family circle. The malady originates from chagrins, domestic dissensions, reverses of fortune, privations; and the presence of the parents and friends of the patient, exasperates the evil. Sometimes, an excess of tenderness keeps up the disease.

A husband persuades himself that he cannot secure the happiness of his wife; and resolves to fly from her, or to terminate his existence, as the only means by which he can render her happy. The tears of his wife, and her sad countenance, are only new motives for inducing him to commit the act.

Has the first commotion amid the intellectual and moral faculties, originated in the house of the insane man, and in the midst of his neighbors? The sight of this house and his acquaintances, will constantly revive in the mind of the insane person, his peculiar ideas and sensations. The only means by which we can break up this fatal association, must consist in preventing a renewal of the impression; and, in order to effect this, the patient must be removed from the causes that produce it.

We would remark generally, that the insane conceive a dislike and aversion to certain individuals, without any motive, and nothing induces them to change their views. The object of their hatred is usually the person who, before their illness, enjoyed their love. It is this circumstance, which renders this class of persons so indifferent, and sometimes so dangerous to their friends; whilst strangers are agreeable to them, and suspend their delirium; either because novelty with respect to persons and things is always useful, or because they have no recollection, no painful back thought, to attach to the person of a stranger; or because, through a secret sentiment of self-love, they wish to conceal their condition.

I have seen patients appear very calm before their physician and strangers, at the same time that they would abuse in a low voice, their relatives or friends; and conceal themselves, in order to pinch, prick, or scratch them. Such are the obstacles and inconveniences, which present themselves in view of the sojourn of the insane in their families, when we desire to subject them to medical treatment. Let us now look at the advantages which patients will derive, from treatment in an establishment especially devoted to their use; where, placed in circumstances quite unusual, and committed to the care of strangers, they will receive new impressions.

Where shall we isolate the patient? We have already said that the insane man should be placed in an institution devoted to the treatment of mental diseases. We prefer a house of this kind to a private one, where our object is effected at great expense. Partial isolation rarely succeeds. It presents many inconveniences, which we would wish to shun, by withdrawing the insane from their accustomed places of abode; and offers very few of the advantages of a house in which many patients are assembled.

The strongest objection that can be urged against establishments devoted to this kind of treatment, is founded upon the frightful effects that may result from mingling with companions in misfortune. I reply, that, generally, it does not injure them,—that it is not an obstacle to a cure—that it is a valuable means of treatment, because it obliges the insane to reflect upon their condition, because that, common objects no longer making an impression upon their minds, they are diverted from themselves, by the extravagances of their companions. They are obliged to live, *out of themselves*, and to occupy their

thoughts with what is going on around them,—to forget themselves, as it were, which is, in itself, a means of cure. The desire of being free, and the need of seeing parents and friends, grow out of the privation of these privileges, and replace imaginary and unreasonable wants and desires.

Ennui exercises, in its way, a favorable influence upon the ideas and affections of the insane. The presence and conduct of their companions, serves as a text to the physician, who wishes to address himself to the imagination. However, there are cases in which isolation, like all other remedies, even the most useful, may prove injurious; when it is not modified by the susceptibility of the insane, and the character of the delirium; and with a reference also, to their passions, habits, and mode of life. We should never be absolute in practice. Art consists, in happily distinguishing the indications which ought to lead to a modification of principles, however great the efficacy that experience may attribute to them.

In an Establishment devoted to the treatment of the insane, the arrangements are better adapted to their wants than in a private house. With less suffering to the patient, he is more faithfully attended to. What can be done with a furious patient in an apartment of a private house, however large? A suitable regard for his security, will render it necessary that he should be bound, and confined to his bed; a painful condition, which augments the delirium and fury; while, in a suitable house, he could be indulged in his propensities, with less danger to himself and his attendants. In a house of this kind, his wants are better understood, and the domestics better instructed. The distribution of buildings permit the patients to be removed, from one habitation to another, as his condition, his disposition to injure himself, or his progress towards recovery may render expedient. These truths, useful in the management of the rich who are insane, are of rigorous application in the treatment of the poor.

An Establishment for the insane must be governed by regulations, to which all must submit. This will serve as a response to all objections, and aid in surmounting all repugnance, at the same time that it furnishes motives to obedience, less unpleasant, than the will or caprice of a principal.

There is, in a house of this kind, a movement, an activity, a vortex, into which by degrees, all enter. The most infatuated and jealous lypemaniac finds himself, almost without knowing it, forced to live out of himself; carried along by the general movement, by the example, and by the impressions, often strange, which are perpetually striking his senses. The maniac himself, attracted by the harmony, order and regularity of the house, defends himself better against his impulses, and abandons himself less to his eccentric actions.

In an Establishment for the insane, there must be a Head, and a single Head, from whom all authority should emanate. Reil, and those who, after him, have desired that a hospital for the insane should be directed by a physician, a psychologist and moralist, had no practical experience, and did not appreciate the inconveniences attending a division of powers. When there are several coördinate powers, and the mind of the insane knows not upon whom to repose, it wanders in doubt; confidence is not established. Now, without confidence, there is no cure. A spirit of independence evades obedience, when authority is divided. It is to prevent this double inconvenience, that we admit with caution, of interviews between the insane and their friends. The insane are but grown up children, children too, who have received false notions, and a wrong direction. So many points of resemblance do they bear to children and young persons, that it will not be surprising, if both one and the other should be governed on similar principles.

The physician who, in an establishment of this kind, gives an impulse to every thing; to whom is referred whatever interests each individual;—sees his patients more frequently than he would otherwise do,—is more frequently in-

formed of whatever affects them,—interferes in their dissensions and quarrels, —governs them by principles more clear and positive,—controls their actions, and causes them to be attended by people who are accustomed to the care of the insane. Attendants should set an example of deference and obedience to the regulations, and head of the house. By their numbers, they present an array of force, which renders its employment unnecessary; they persuade those most excited, that all resistance would be vain; in fine, living among the sick, the latter are not alone, nor always surrounded by irrational persons. Example, which exerts such power over the determinations of man, has also great influence with the insane. We must not forget what has been said respecting the sagacity of the insane, in comprehending what is passing around them. The restoration and discharge of a patient inspires confidence in the hearts of others. It establishes in their minds the hope of a cure, and the certainty of being set at liberty. The convalescent, by their contentment, their advice and counsels, console and encourage the sick, and are, in this way, of great service to them. Thus, the inmates of a house of this kind, produce a happy influence, one upon another, and every thing concurs to favor the success of treatment. The arrangements also, are such that the sick can neither injure themselves nor their companions in misfortune, nor those who serve them.

The quietude which the insane enjoy, far from tumult and noise; the moral repose which their withdrawal from their former habits, their business, and domestic cares procure, are very favorable to their restoration. Subjected to a regular life, to discipline, and a well ordered regimen, they are constrained to reflect upon the change in their situation. The necessity of restraining and composing themselves with strangers, and the dwelling together with companions in misfortune, are powerful auxiliaries in restoring their lost reason.

The attentions which an insane person receives in his family, pass for nothing, though all around him be eager in offering them. But away from home, the care that is bestowed upon him is appreciated, because it is new, and is not strictly due. Civilities, attentions and mildness, will produce an effect, because he has little right to expect them at the hands of those with whom he is not acquainted. Let a man, practiced and skillful, profit by this disposition; let him command confidence and esteem, and the insane will shortly find in the unknown, a person whom they must control, or to whose kindness submit. The necessity of a dependence from which they cannot escape, hope, fear, ennui even, will begin to make them suspicious that they are sick. Having acquired this conviction, the cure is not far distant.

Sometimes the insane, when placed in a new situation, think themselves abandoned by their relatives and friends. But let those to whom they are brought, be prodigal of consolations and regards, let them promise to assist in renewing the connection which binds these unhappy people to moral existence, and they pass from a state of despair to that of hope. This contrast of sentiments, springing from their presumed abandonment, and the tender cares and sympathy bestowed upon them by strangers, provoke an internal struggle, from which reason sometimes comes off victorious. Others imagine that they have been brought to this new abode, only to be given up to their enemies or to punishment. If these fears are overcome by civil and affable conduct, on the part of those by whom they are surrounded, a cure will soon be effected.

Thus, reason comes to the support of experience, to strengthen the doctrine of isolation, as a preliminary condition to all rational treatment of mental alienation.

But, says an objector, it may happen, that by dwelling together, the insane may injure each other. The soundest mind would be disturbed, were its habits abruptly changed, and brought into contact only with the insane. Be-

sides, after a cure has been effected, how can we conceal from the patient the condition in which he has been? Why tear away from the seat of all his affections, a miserable man, whom misfortunes have overcome? Why shut up a man who, above all things, dreads a prison.—But, how many objections have already been made? How many may not still be offered? These objections however, do not do away with the inconveniences and advantages that we have pointed out above, and to which experience returns a favoring response.

But, it may be said, that there are insane persons who are cured at home. This is true. These cures however, are rare, and cannot impair the general rule. They prove only, that isolation, like all other curative means, ought always to be prescribed by a physician. I will say more,—that isolation has been fatal to some insane persons. And what shall we conclude from this? That we should recommend it with caution; especially when it is to be prolonged; and also, that it is the nature of the best and most useful things, not to be always exempt from inconveniences. To the wise, judicious and experienced physician does it belong, to foresee and prevent them.

It is not easy to determine the period at which isolation should cease. To prevent abuse, extreme caution and tact are requisite. Here, experience is slow to decide. I recommend nothing positive with respect to it, except that when isolation has had no effect, the visits of relatives and friends should be encouraged, exercising much discretion in the choice of the first persons who may be admitted. Visits, in these cases, should be sudden and unexpected, in order to produce a strong impression upon the patient. With respect to convalescents, visits are to be allowed with great caution. Experience shows, that isolation unduly prolonged, is attended with consequences less injurious than its premature cessation.

We should ever bear in mind, that at the commencement of insanity, this affection strongly resembles febrile delirium—that a mistake is easily made, and that unseasonable isolation may compromise the cure of the patient, and the moral responsibility of the physician. In doubtful and difficult cases, we should delay a few days, in order that the characteristics of mental alienation may become evident.

In dementia and idiocy, isolation is only indicated, to prevent accidents which may be grave, and to maintain order and security. Some lypemaniacs are injured by confinement, in consequence of their excessive sensibility. Monomaniacs and maniacs must of necessity be isolated. Confinement is indispensable for the insane poor, because they are deprived of necessary attentions at home, and can, in a thousand ways, compromise their own, and the existence of their friends.

Isolation is not always effected in the same manner. It is partial, when the patient remains at home, and is only separated from the members of his family, and persons with whom he has habitually lived. We isolate an insane man, by causing him to travel with his near connections, friends, or strangers. We isolate him, by placing him alone in a habitation unknown to him, as well as those who serve him. In fine, he is isolated in a public or private establishment, devoted to the reception of many people, affected with mental alienation.

Isolation acts directly upon the brain, and forces this organ to repose, by withdrawing the insane man from irritating impressions,—by repressing the vivacity and mobility of impressions,—by moderating the exaltation of the ideas and affections. By reducing the maniac to the smallest possible number of sensations, we are enabled to fix his attention, by unexpected and oft-repeated impressions. We must, on the contrary, use strong measures with the monomaniac and lypemaniac, to draw them away from their concentrated ideas, and force them to direct their attention upon objects, foreign to their meditations, disquietudes, and delirious pretensions. We must excite the

enfeebled attention of him who is in a state of dementia; but the happy effects which we may propose to ourselves are obtained only by means of strong mental impressions, unexpected events, lively, animated, and brief conversations; for it is not by long arguments that we are to expect to benefit the insane. We should ever speak with truth and sincerity to the insane, and only employ the language of reason and kindness. To expect however, to cure the insane by syllogisms and reasoning, indicates little knowledge of the clinical history of mental alienation. "*I understand you perfectly*," said a young lypemaniac, "*and if I were convinced, I should be cured.*" Said another, "*I know what I ought to do, I would do it; but give me the power, the ability which is wanting, and you will have cured me.*"

It is here that we must employ a perturbing mode of treatment;—breaking up one spasm by another, by provoking moral shocks, which may dissipate the clouds which obscure the reason,—rend the veil which interposes between man and the external world,—break the vicious chain of ideas,—bring to an end injurious associations,—destroy their despairing concentration of thought, and break the chain which paralyzes all the active powers of the insane. We effect this object by arousing the attention of the insane, now by presenting to them new objects, now by causing them to witness new and surprising phenomena; now, by putting them in opposition to themselves; and sometimes, by taking up their ideas, caressing and flattering them. By complying with their desires, we secure their confidence,—a sure test of an approaching cure. We must bring into subjection the whole character of some patients, conquer their pretensions, control their freaks of passion, break down their pride; while we must arouse and encourage others.

We repress the passionate transports of the maniac, and sustain the broken spirit of the lypemaniac. We oppose the passions of the one to those of the other, and from this struggle, reason sometimes comes off victorious. Fear is a depressing passion, which exercises such an influence over the economy, as to suspend, and even extinguish vital actions.

Can we hope to cure those whom fear pursues and devours, if we do not inspire them with confidence? Many insane persons sleep not; aroused by panic terrors. Encourage them, by causing some one to sleep in their chamber, or by allowing them a light during the night. It is above all, important to substitute a real for an imaginary passion. This monomaniac becomes dissatisfied, although using every thing with an unsparing hand. Cut him off from this habit, and impose upon him real privations; then will satiety, founded on reason, prove a powerful means of cure. A lypemaniac believes that he is abandoned by his friends. Deprive him of those proofs of affection which he forgets; then will he regret their loss, and desire them; and this natural uneasiness, these reasonable desires, will prove a means of cure.

To combat the self-love and vanity of some insane persons, certain allusions may be made to the superiority of others, and to the embarrassments of their own position. Sometimes displeasure opportunely manifested, has been useful. Great experience however, is necessary, to control these passions. The exciting passions of love and ambition, have been called in, to aid in the treatment of the insane. A melancholic is in despair. A law suit is supposed to be instituted against him. The desire to defend his interests restores his intellectual energy. A soldier becomes a maniac. After some months, he is told that a campaign is about to commence. He demands permission to rejoin his general, returns to the army, and arrives there in good health.

Pinel offers some remarkable observations, on the art of directing the intelligence and passions of the insane.

I have published several in my dissertation on the passions, and proved by facts, how valuable is moral treatment, whether we desire to prevent the outbreak of an attack of insanity, or are called to treat the malady, or propose

to confirm a convalescence. This treatment besides, is not confined exclusively to mental maladies: it is applicable to all others. It is not enough to say to the sick, *courage, courage, you will be better.* A feeling heart must dictate these consoling words, that they may reach the mind and heart of him who suffers. How happens it, that in an age in which we have so triumphantly established the influence of the moral over the physical man, that these researches upon man in a state of disease, have not been extended? Gaubius complains of the negligence of physicians in this respect.

The ancients attached great importance to moral therapeutics, which are so much neglected by the moderns. From the highest antiquity, the art of healing was committed to the ministers of the altar. There were temples celebrated for the cures they had wrought. A long voyage, a new climate, the salubrity of holy places, the change of habits and modes of life, purifications, processional marches, the use of thermal waters, and diet, prepared the way for the moral influence which their ceremonies and mysterious practices were to produce upon the sick. The Egyptians, Greeks and Romans, had their Æsculapii, whose priests preserved a medical liturgy, and to whom they were accustomed to come, seeking health. The moderns made their pilgrimages to the revered remains of some saint. In some cities, festivals were celebrated, to which were conducted with pomp, both epileptics and the insane, who were sometimes cured.* In our day we have found a great physician. His name, his consolations, his councils, are often more useful than his remedies, because his reputation commands confidence, and permits us not to doubt respecting a cure.

The means and resources proper for the moral treatment, and the opportunity for its employment, are indicated by circumstances. Examples of its employment are found in all books. I have published many of them, which may be found in the different essays of which this collection is composed.

The ancients have boasted of the wonderful effects of music. Herodotus and Pausanias assure us, that most legislators were musicians,—that music was employed to civilize men. The phrygian measure excited to fury,—the lydian, soothed to melancholy—the eolian was devoted to the amorous passions. Each passion had a rhythm which was proper to it; while the moderns have sacrificed every thing to harmony. The Jews, Greeks, and Romans were all equally aware of the power of music.

Every body knows the effect which the "*ranz des vaches*" produced upon the Swiss. Music acts upon the physical system, by producing gentle shocks upon the nerves, by quickening the circulation, as Gretry observed in his own person. It acts upon our moral nature, or the mind, in fixing the attention by mild impressions, and in exciting the imagination and even the passions, by agreeable recollections. Did they wish success in the treatment of the insane, they would make choice of a small number of instruments,—place the musicians out of sight of the patient, and execute airs familiar to his infancy, or which were agreeable to him before his illness. I have often employed music, but have rarely been successful with it. It brings peace and composure of mind, but does not cure. I have seen those whom music rendered furious; one, because all the tones appeared false; another, because he thought it dreadful that people should amuse themselves near a wretch like him. Finally, I believe that the ancients have exaggerated the effects of music, as well as many other things. The facts, reported by the moderns, are not sufficiently numerous to enable us to determine the circumstances in which music may be useful. However, it is a valuable remedial agent, particularly in convalescence. It ought not to be neglected, however indeterminate may be the principles of its application, or uncertain its efficacy.

* Lecture II. Note respecting the village of Gheel.

The means of diverting the mind are, nevertheless, after labor, the most efficacious agents in the cure of the insane, but we cannot rely upon the success of those which exalt the imagination and passions.

The lypemaniac, always suspicious, appropriates to himself whatever strikes his senses, and makes it serve as aliment to his delirium. The maniac becomes still more excited by the representation of the passions, by the vivacity of the dialogue, and the playing of the actors, if he is present at a theatrical representation. Our opinion respecting amusements of this kind is supported by the example of the Egyptians and Greeks. But with them these exhibitions partook of a religious character, adapted to calm the passions, and to impose upon the imagination, at the same time that the mind was diverted by the pomp of the ceremonies. A mind at all accustomed to reflection, is astonished that theatrical representations should formerly have been permitted at Charenton; and a German author regards the multiplication of theatres as one of the causes of the great number of insane people in Germany. The maniacs could never be present at the theatrical representations of Charenton, the monomaniacs rarely,—and imbeciles could not be benefited by them. Those to whom the spectacle could be useful, were already cured, and it would have been more profitable to restore them to liberty than to shut them up for three hours in a place, confined, heated and noisy, where every thing tended to produce cephalalgia. Thus there were few representations that were not signalized by some violent explosion of delirium, or by some relapse. This mode of amusement, by which the public were imposed upon by being informed that the insane themselves played comedies, never obtained the approbation of the Physician in chief of the Establishment. Royer-Collard exerted himself vigorously against it, and was ultimately successful in bringing it to an end. I once accompanied a young convalescent to a Comic Opera. He every where saw his wife conversing with men. Another, after the space of a quarter of an hour, felt the heat in his head increasing—and says, let us go out, or I shall relapse. A young lady, being at the Opera, and seeing the actors armed with sabres, believed that they were going to assail her. All this happened, notwithstanding I had selected both the individuals I was to accompany, and the pieces that were to be acted. A theatrical spectacle can never be suited to the condition of the insane, and I much fear, not even to that of convalescents.

Seneca says, that traveling is of little benefit in moral affections. He cites on this subject, the reply of Socrates to a melancholic, who was complaining that he had derived little advantage from his travels. "*I am not surprised; do you not travel with yourself?*" However, the ancients prescribed traveling, and sent their patients to take the hellebore of Antycira, or to make the leap at Leucates. The English now send their melancholics into the southern provinces of France, into Italy, and even into the colonies. I have always observed that the insane are relieved by a long voyage, especially if they have visited distant countries, whose situation and aspect took strong hold of their imagination; and if they experienced difficulties, opposition, disappointments, and the fatigues incident to travel. Traveling acts moreover, by exciting all the assimilative functions. It promotes sleep, the appetite and secretions. Convalescents, who fear to re-enter the world, where they will be called upon to speak of their complaint, are less uneasy, after a journey which may be made the subject of conversation with their friends. Such are the agents which exercise a direct influence over the brain, and consequently over the intellectual and moral disorders of the insane; and such are the general views of their application, which I would suggest. They have for their object, to restrain the mental operations of the maniac, and to draw out and fix upon external objects the mind and thoughts of the monomaniac. The principles of physical treatment cannot be reduced to propositions so general.

No one doubts the necessity of acting upon the brain, in combating the causes which have produced and keep up insanity; but the nature of these causes often escapes us. The brain is not always the primitive seat of their action, and this, moreover, does not produce the same effect in every case. The physical means, therefore, adapted to avoid the fatal effects of these causes, must be varied. They are hygienic, or pharmaceutic.

The constitution of the insane becomes rapidly enfeebled. They contract affections of the skin, lymphatic engorgements and scurvy; a circumstance which shows the importance of a suitable site, as well as mode of construction of their habitations. In building a house for the insane, we should select a site, in our country, with a southeastern exposure; with an exposure to the west in warm countries; and to the south, at the north. The soil should be dry, and light. The lodging rooms should be protected against humidity and cold; and favorably disposed for ventilation. It is a grave error to suppose that the insane are insensible to atmospheric influences. The greater part of them avoid cold, and desire warmth.

The ancients recommended that maniacs should be placed in a situation cool and obscure. This precept is excellent during the acute period of the malady; but when it has passed into the chronic state, Pinel advises that they be left to all the activity of their movements, and in the open air. Situations well lighted, cheerful and picturesque, are suited to lypemaniacs. Those who have become insane in warm climates, will be more likely to recover their reason by returning to a cold one; and reciprocally. Those afflicted with nostalgia will be restored only by returning to their country, the places where they were born, and where their infancy was passed.

The clothing, especially that of the lypemaniac, should be warm. The use of woolen garments next the skin, and of dry frictions, will be found of service. The bedding may consist of a matress and hair-quilt, together with a bolster and pillow of horse-hair. The patient should repose upon a bed of horse-hair. The covering should be light, and the head usually uncovered. Alimentation should be varied according to the nature and period of the malady,—the individual circumstances and complications. At its commencement we prescribe the diet to which most patients are subjected during the early stage of other acute disorders; at a later period the quantity and quality of aliments are modified. They should always be simple, prepared without spices, and easy of digestion. During convalescence, the aliment should be more substantial than previously, without ever being excitant, and in some very rare cases should be more abundant. The food should be distributed with discretion. We should avoid furnishing at once a day's supply, as is done in some hospitals. It results, from a neglect of this precaution, that the patients devour or destroy a day's provision at once; and, tormented by hunger during the remainder of it, they become more furious or sorrowful, supposing that they are maliciously refused a supply of their wants, or that the design of starving them to death, is entertained by those who have the charge of them. The greater part of maniacs and monomaniacs are distressed by thirst. We must satisfy this desire by placing appropriate drinks at their doors, or by distributing them at certain hours during the day.

Those aliments and drinks which excite the patient, should be proscribed during every period of the malady. Nevertheless, they may be adapted to some cases of dementia, or monomania, and to the period of convalescence, as I have just remarked. Both the secretions and excretions should be favored in every possible manner. We should watch with care, the condition of the bowels; for constipation is a frequent symptom, and one which exasperates the delirium.

Corporeal exercises, riding on horseback, the game of tennis, fencing, swimming and traveling, especially in melancholy, should be employed, in aid of

other means of treatment. The culture of the earth, with a certain class of the insane, may be advantageously substituted for all other exercises. We know the result to which a Scotch farmer arrived, by the use of labor. He rendered himself celebrated by the cure of certain insane persons, whom he obliged to labor in his fields.

Bourgoin, in his *Travels in Spain*, remarks, that the rich at the Hospital for the insane at Saragossa, are not restored, because they are not obliged to labor; whilst the poor work and are cured. Pinel recommends that an Establishment for the insane should have a farm connected with it, on which the patients can labor. The cultivation of the garden has succeeded happily in the cure of some insane persons. At the Salpêtrière, the best results follow the manual labor of the women in that Hospital. They are assembled in a large working room, where some engage in sewing or knitting; while others perform the service of the house, and cultivate the garden. This precious resource is wanting in the treatment of the rich of either sex. An imperfect substitute is furnished, in walks, music, reading, assemblages, etc. The habit of idleness among the wealthy, counterbalances all the other advantages which this class enjoy for obtaining a cure.

To establish the basis of a certain therapeutic treatment of mental alienation, it would be necessary to understand all the general and individual causes of this malady; to distinguish by certain signs, the source from whence all disorders spring; to determine whether the physical reacts upon the moral, or the moral upon the physical; to establish the varieties of insanity that are cured spontaneously; those which call for moral aids; those which require medication; and finally, those which yield only to a mixed treatment. What accidents have befallen, what obstacles opposed those physicians, who have been unwilling to see but one disorder, in all the forms of insanity that they have been called to treat! They inferred that delirium being symptomatic of almost all maladies at the approach of their fatal termination, insanity might also be symptomatic. They were not ignorant that there were forms of insanity evidently sympathetic: they knew that a thousand predisposing and exciting causes lead to insanity; but having regard only to the most apparent symptoms, they have permitted themselves to be diverted by the impetuosity, violence, and changefulness of the symptoms, and neglected the study of the causes of insanity, and the relations which they bear to the symptoms. Drawn away by theories, some have seen nothing but inflammation; have charged upon the blood the production of insanity, and employed bleeding to excess. Others believed that the bile was the source of irritation, and that it restrained and interfered with the due performance of organic functions. They were prodigal of emetics and drastic purgatives. Others still have taken account only of the nervous influence, and employed antispasmodics in excess. All have forgotten, that if the practitioner ought always to have before his mind great general truths,—systematic views, which are to predominate, and which constitute medical science; art should confine itself to the most careful study of the circumstances and symptoms, which will best acquaint us with the causes and seat; in a word, with the nature of the malady which we are to combat.

When called to visit an insane person, after having acquired a knowledge of his history, together with the predisposing and exciting causes of his attack, we should inquire if there are no urgent indications to fulfil. To ascertain the cause of the malady, will, in general, furnish a clue to the best mode of treatment. To recall the menses when suppressed, to reëstablish old ulcers, to provoke cutaneous affections, and to insert issues, if the patient had formerly been accustomed to them, will be peculiarly proper. If there is active excitement attended with plethora, these symptoms must be controlled by sanguine evacuations, tepid baths and emollients long continued; together with cooling and laxative drinks. Sometimes it will be necessary to apply to

the skin rubefacient derivatives. At the same time, the strictest attention should be paid to the diet and regimen of the patient. Treated as an acute disorder, almost always at the expiration of 8, 15, 21, or 30 days, there is a remission, and sometimes a very marked intermission. Then, in connection with those moral means appropriate to the character of the delirium, we must set ourselves to combating those material causes, whether hygienic or pathological, which had preceded and induced the malady; in every case, following the individual indications. Let it suffice, to point out a few of these indications. A man becomes insane, who has been subject to hemorrhages which no longer exist. The physician succeeds in establishing this evacuation, and at the same time in restoring reason to his patient. A cutaneous affection disappears; an ulcer dries up, and mania or monomania bursts forth. On recalling the disorder of the skin, and reopening the ulcer, it is almost certain that the insanity will cease.

When we have attacked and overcome the general derangements, the painful effects of particular causes, if the insanity is not cured, we may have recourse to an empirical treatment. We may here vary without ceasing, those measures which experience suggests. We shall point them out, when speaking of the different forms of insanity. We shall content ourselves for the present, by stating our opinion respecting the mode of action of certain remedies denominated heroic, in the treatment of this disease.

Water by all methods, and at every temperature, has been administered to the insane. Tepid baths, from 20° to 25° Reaumur, are the most useful. We may even prolong their use for several hours in succession, among lean, nervous and very irritable subjects. When there is a strong determination of blood to the head, we find it advantageous to apply bladders filled with very cold water, or cloths saturated with the same to the head, during the continuance of the bath. The cold bath is adapted to young, strong, and robust subjects, who are devoured by heat. The cold acts by removing to some extent, the excess of heat, or by exciting the tonic action of the skin. Some authors have advised hot baths. Prosper Alpin advises them; perhaps we neglect them too much. The baths are rendered more active by mingling with the water divers kinds of substances, more or less medicinal.

The bath of immersion consists in plunging the patient into cold water, and withdrawing him immediately. This may be repeated three, four, five and six times. The bath of affusion, following the method of Currie, is administered by placing the patient in an empty bathing tub, and pouring upon his head cold water, whose temperature is reduced at each bath. The baths of immersion and affusion are particularly useful to subjects enfeebled by masturbation, or by long grief, and in whose cases we wish to produce a reaction, by withdrawing from the centre, nervous power, and calling it to the circumference. These baths differ from the bath of surprise. The latter consists in plunging the patient into the water when he least expects it. We administer it, by precipitating him into a reservoir, a river, or the sea. It is the fright which renders this means efficacious in overcoming sensibility. We can conceive the vivid impression that a patient experiences, who falls unexpectedly into the water, with the fear of being drowned.

Van Helmont recommends that the patient be kept under the water, till loss of consciousness takes place. Van Swieten, commenting upon Boerhaäve, insists upon this means, which was almost the only one, in connection with blood-letting, employed during the last century. However, we have no facts illustrating the effects of this practice. Pinel proscribed the bath of surprise. I have never made use of it, but am certain that it has been fatal. When I hear of its being prescribed, I should prefer rather, that they advised to precipitate the patient from the third story, because we have known some insane persons cured by falling upon the head. The douche consists in pour-

ing water upon the head from a greater or less height. It was known to the ancients; and is administered in different ways. At Avignon, the tube of the douche, with a flute-like termination, is placed about a foot above the head of the patient. At Bordeaux, it terminates in a head like that of a watering pot. At the Salpêtrière, the douches terminate in tubes of four, six and twelve lines in diameter, and the water falls from different heights. The water is usually at the atmospheric temperature. It has been proposed to employ hot water in sôme cases of dementia. The patient receives the douche, seated in an arm chair; or better, plunged into a bath of tepid or cold water.

The douche produces its effects, both by the action of the cold, and the percussion. It exercises a sympathetic influence upon the region of the epigastrium. It causes cardialgia, and desires to vomit. After its action ceases, the patients are pale, and sometimes sallow. It acts also morally, as a means of repression; a douche often sufficing to calm a raging excitement, to break up dangerous resolutions, or force a patient to obedience. It is that class of the insane who are young, strong and active, who require the douche. They experience after having received it, a sensation of coolness about the head, which is very agreeable to them, and often very useful. It is especially proper in cases attended with cephalagia. The douche ought to be employed with discretion, and never immediately after a repast. It is necessary to obviate constipation before employing it. Its employment ought to be continued but a few minutes at a time, and its administration never to be left to servants. They may abuse it, and we ought not to be ignorant that the douche is not exempt from grave accidents. Ice has been applied to the head. Its long continued application calms the cephalagia and fury which resists blood-letting, general baths, and the douche, especially at the commencement of mania; when there is redness and heat of face, threatening cerebral congestion. This application succeeds much better when the feet of the patient are plunged into very warm water, or enveloped in an irritating cataplasm.

Revulsive pediluvia, produce a remote irritation, which is often salutary. We render them irritant, by the elevated temperature of the water, by the addition of the muriates of soda, ammonia, and powdered mustard. We ought to remember, that if the water is too warm at first, it causes pain, which reacts upon the brain. By plunging the legs into an emollient decoction, slightly warmed, and allowing them to remain there for a considerable period, we relieve the patient of cramps. We moreover make use of water by jets, frequently repeated; throwing it upon the faces of some, who are laboring under a stupor. These slight excitements, frequent and unexpected, have sometimes aroused patients from their lethargy. Water has been prescribed by injections; sometimes pure, sometimes combined with purgative, and soothing or antispasmodic remedies, as the indications required. The douche by the rectum has also been advised, to overcome obstinate constipation,—to unload the large intestines, and to relieve the spasm of the alimentary canal; sometimes to give tone to this tract, or to provoke a derivative irritation.

Avenbrugger recommended the internal use of cold water, drank in large quantities, at the rate of a tumbler every hour. Hufeland regards this means as of service in mania. Leroi d'Anvers has published an account of the advantages of cold water, as a preventive of suicide. Many facts seem to justify this practice. The most interesting is that of Théden, a very distinguished Prussian surgeon, who having been hypochondriacal in his youth, at length became melancholic, with a disposition to commit suicide. The copious use of cold water restored him to health. He drank of it from twenty-four to thirty pints a day. From a favorable opinion of its utility, as well as from the force of habit, Théden has reported, that at the age of eighty years, he drank every day, several pints of cold water. Hufeland confirms this

fact by two cases which he has collected. This means has been particularly advised, as a preventive of suicide.

Evacuants have been celebrated from the highest antiquity, and for a long time formed the basis of treatment in insanity, particularly lypemania. Far from being adapted to all cases, they may augment the evil. The moderns have advised emetics, which ought to hold a high place in the treatment of some forms of monomania, and lypemania with stupor. Emetics are suited to those cases in which the sensibility is blunted, where the patient seems stricken with atony, whilst they would be injurious, did irritation exist. Mason Cox places emetics in the front rank of remedies, in every stage of insanity. Rush believes emetics most useful in hypochondriacal melancholy. They repeat them many days in succession. Besides the sensible evacuations which they provoke, they excite the transpiration, and cause succussions useful in relieving spasms of the abdominal viscera. Purgatives are also praised. The choice of purgatives is not a matter of indifference. In some cases, we prefer those which have a special action upon the hepatic system, the hemorrhoidal vessels, upon intestinal worms, etc. Purgatives often cause irritation, thereby suspending the activity of the skin. To prevent these accidents, or consecutive effects, we alternate them with the tepid bath. Many insane persons think themselves very well, and refuse all medication. We may triumph over this repugnance by causing them to take without their knowledge, some substance which, by irritating the stomach or intestines, provokes pains, and even evacuations. These accidents, by causing uneasiness in the mind of the patient respecting his health, render him docile. Hellebore, gamboge, bryony, aloes, submuriate of mercury, and especially the tartrate of antimony and potassa, together with purgative mineral waters, are the therapeutic agents, which we may at such times employ with advantage.

M. Chrestien, a celebrated practitioner of Montpellier, proposes colocynth, administered by friction upon the abdomen, as a sure purgative. He goes so far as to recommend this substance as a specific in insanity. I have repeated the experiments of M. Chrestien, upon twenty insane persons, but have not been equally successful with himself. The colocynth not only failed to effect a cure, but did not purge, except in two instances after confinement.

On the discovery of the circulation of the blood, it was believed that we had discovered the cause of every disorder, and a remedy for all ills. Blood was shed abundantly. The blood of the insane was the more freely shed, as by bleeding them to faintness, it was believed that they were cured. This treatment was extended to all the insane. In every hospital, there was established what was called, the treatment of the insane on this principle; that the blood being too abundant and too much heated, ought to be evacuated and cooled. Besides, in the hospitals of France, where some attention was paid to the insane, in spring and autumn, they bled them once or twice, and bathed them in cold water; or cast them, bound hand and foot, into a river or reservoir. If a few victims of such gross mismanagement escaped, they cried out, a miracle! Such was the prejudice not long since even at Paris, in favor of bleeding, that we were accustomed to receive pregnant women, who were bled by way of precaution, before being sent to a house where bleeding was proscribed. Excess in this respect has sometimes been so great, that I have had in charge an insane man, who had been bled thirteen times in forty-eight hours. Pinel set himself against this abuse, and cites examples which ought to be presented to the observation of all physicians. I can add, that I have many times seen insanity increase after abundant menstrual flows, after hemorrhages, and after one, two and even three bleedings. I have seen a state of sadness pass into mania and fury, immediately after bleeding; and dementia to replace, reciprocally, the condition of mania. I do not believe it necessary

to proscribe blood-letting in the treatment of insanity. It is indispensable in plethoric subjects, when the head is strongly congested, and hemorrhages, or habitual sanguine evacuations have been suppressed. At the commencement of insanity, if there is plethora, if the blood rushes violently to the head, if some habitual hemorrhage is suppressed, we bleed largely, once, twice, or thrice; apply leeches to the jugular veins and temporal arteries, and cups to the base of the brain. At a later period, sanguine evacuations are local, and employed as revulsives, or as supplementary to suppressed evacuations, etc. The use of energetic tonics and antispasmodics, ought also to be appreciated. Camphor, musk, iron, quinine and antimony, have been employed in very large doses, as specifics in insanity. These medicines are useful, but of individual utility. They succeed surprisingly well, when one is sufficiently happy to seize the proper indication for their use, which the disease presents; but are hurtful and dangerous if employed indiscriminately.

Some insane persons sleep little; passing weeks and months without repose. Narcotics are employed to produce sleep. These medicines are rather hurtful than salutary, especially when there is plethora, or congestion of the head. For a long time, Valsalva and Morgagni proscribed opiates, and daily practice confirms the judgment of these great masters. Regimen, labor and exercise, are the true remedies for insomnia. Tepid or cool baths provoke sleep, are truly efficacious, and are in no way dangerous. Setons, moxas, the actual cautery, cups, vesicatories, irritating and mercurial frictions have been employed. These means are excellent auxiliaries to provoke a revulsion, to bring back a cutaneous eruption which has been suppressed, to arouse the sensibility of the skin, which is often in a state of atony, to excite a general reaction, etc., etc. It has been proposed to envelope the head with epispastics, or some other irritating compositions; and to employ a saturated solution of tartrate of antimony and potassa, in water. I must confess, that I have never seen those means succeed, which augment irritation,—torment and disturb the sick, and persuade them that we wish to punish them. It is almost always among monomaniacs, or persons in a state of dementia, that we prescribe a course of medication, so active and perturbating. I do not deny, that in some cases, success may have followed this treatment; but I believe that those cases are very rare, and the indications very difficult to appreciate.

I cannot omit making some remarks respecting the use of fire and moxa, applied to the top of the head, and over the occiput or neck in mania. Doctor L. Valentin has published some valuable observations concerning the cure of mania by the application of fire.* I have many times applied the iron at a red heat to the neck, in mania complicated with fury, and sometimes with success. I made very many attempts, which always proved fruitless, when I addressed myself to subjects which presented symptoms of paralysis. The seton in the neck, has succeeded better in my hands, except when I have applied it to individuals who did not experience the same complications, and who were in that stage of dementia which is confounded with idiocy.

Gmelin and Perfect affirm, that they have effected cures by electricity. At the Salpêtrière, during two summers, those of 1823 and 1824, I submitted to the influence of electricity a large number of our insane women. One only was cured, in the course of my experiments. This was a young and very strong girl, who had become a maniac in consequence of a fright, which suppressed her menses. She had been insane for a month, and was electrized for fifteen days. At the menstrual period, the discharge appeared, and she

* An Essay and Observations concerning the good effects of the actual cautery, applied to the head in various disorders. Nancy, 1815, in 8vo.

was immediately restored. Wennolt tried galvanism. I also employed it, in connection with Professor Aldini, in 1812. Twice the menses were restored, but the delirium persisted. Experiments have been made with magnetism, particularly in Germany. The facts reported in France, in relation to it, are neither exact, nor well observed. In 1813 and 1816, I made experiments with the late M. Faria, upon eleven insane women, maniacs or monomaniacs. One only, who was remarkably hysterical, yielded to the magnetic influence; but her delirium underwent no change. Magnetism produced no effect upon ten other insane persons. These experiments were made in presence of M. Desportes, governor of the hospitals, and others, besides several physicians. I repeated the same trials, several times, with divers magnetizers, with no better success.*

I ought to say a word respecting the machine of Darwin. This instrument which, nearly enough, resembles a circular swing, has passed from the arts, to be employed in medicine. Mason Cox made much use of it. Hufeland and Horn employed it at Berlin. One of them remains at Geneva, which furnished Odier an opportunity to observe its effects. Doctor Martin, physician of the hospital at Antiquaille, where to this day the insane of Lyons are treated, has informed me that he had been frightened at the accidents which the insane had met with, who had been submitted to the influence of this machine. They fell into a state of syncope, and had also copious evacuations both by vomiting and purging, which prostrated them extremely. This mode of treatment, employed with prudence, may be useful to such insane persons as refuse all kinds of medicine, and who present symptoms of gastric derangement.†

We should not complete all that relates to the treatment of insanity, did we neglect to speak of the modes of preventing it. Prophylactic measures have for their object the preventing of the disorder, or the return of an attack. These measures are either general or particular. They have been already indicated, by an exposition of the causes of insanity. We should avoid marriages with persons descended from insane parents. The education of man begins in infancy, and we should guard against the recital of such stories and fables to children, as disturb the brain, or painfully excite the imagination. While cultivating the mind, we should at the same time form the heart, and never lose sight of the fact that education consists less in what we learn, than in correct habits of mind, feeling and action. If education is neither religious nor moral; if the child meets with no opposition to his wishes or caprices; if every one yields to his desire; how will he familiarize himself to the difficulties with which life abounds? We should not force the principles of feeling and intelligence, by early fatiguing the brain with lessons of inordinate length. We should avoid errors of regimen, which often, at the tenderest age, predispose to insanity. We should control, and direct the passions of the young.

The education of those who are born of parents already insane, should be less devoted to the cultivation of the mind, than the strengthening of the physical powers. The preceptor, informed beforehand of the mental state of their parents, and the wanderings of their passions, will educate his pupils with reference to this knowledge,—will moderate their undue ardor of mind,

* Georget has given an account of the experiments in magnetism, which he made at the Salpêtrière, in a work entitled: "*Physiology of the Nervous System.*" Paris, 1821, tome I. Page 267, and tome II. p. 404. M. Dechambre, who repeated the experiments which he performed, is convinced that Georget was the dupe of his pretended somnambulist. See *Medical Gazette*, year 1835, for a very witty account of the experiments made by M. Dechambre.

† Since the first edition of this article was published, the rotary machine has been every where abandoned.

—check their wayward propensities, and fortify them against the seductive influence of the passions; whilst the physician, aware of the physical causes which have provoked the disease in the persons of their parents, will prevent the development of these causes, or diminish their deplorable effects, by regimen and medicines adapted to the wants of their children.

How can we assure ourselves of his convalescence, and prevent relapses, if the patient is not submitted during a period, more or less protracted, to a mode of life appropriate to his constitution, and to the causes and character of the malady from which he has just been restored? if he avoid not the predisposing, physical and moral causes,—if he is not watchful against errors of regimen, excess of study, and transports of passion? Experience has taught us that relapses often take place, in consequence of the simultaneous development of physical and moral causes. We must attack with energy, these causes, from the moment that they manifest themselves, without awaiting the explosion of the delirium. An emetic, and purgatives given in season, may arrest an attack of insanity. The application of leeches, and blood-letting, in cases of slight menstrual disorder, prevent attacks, which might otherwise have taken place. The disappearance of a cutaneous eruption, of the gout, or rheumatism, or an habitual evacuation, has preceded a first attack of insanity. We must be ever watchful of these metastases and suppressions. What has been said respecting the precautions which the physical state of those who have been insane, demands, is equally true with respect to the moral. One man is choleric; he will relapse unless he exercise all his strength to overcome this passion. Another has lost his reason in consequence of domestic trials. He ought from henceforth to be spared from these afflictions. A third remains in imminent danger of a relapse, if he does not reform his conduct, and abandon the excesses that have preceded his first attack. It is for want of foresight that insanity is so often hereditary; and in consequence of imprudences, that persons who have had one attack of insanity are subject to a recurrence of the same malady.

[In the moral treatment and general regimen, recommended by our author for the insane, we heartily concur. It is precisely what at this day is universally admitted and employed. His remarks however, with respect to the use of tonics, and narcotic and sedative agents, are not in accordance with the practice in this country.

In our Institutions, either singly or in combination, they form in a majority of cases requiring it, the basis of treatment, and are indeed of very general application. It is proper however to state, that some of the Medical Superintendents of Institutions for the insane, whose opinions are entitled to high consideration, while they admit of tonic and corroborant treatment in all the forms of insanity, regard with no little distrust, if not with decided disapprobation, the use of narcotics and sedatives.

The reported results of treatment on the part both of the advocates and opposers of these agents, furnish nothing that can with propriety be regarded as decisive on the subject; nor will the latter perhaps admit, that their preferences have been, either by themselves or others, submitted to the test of an extended experience.

In cases of extreme nervous irritability and excitement, attended with much mental agitation, as well as when the mind is weighed down with fearful apprehensions of impending calamities, or a settled propensity to suicide exists—conditions, both of the body and mind which are constantly to be found in Institutions for the insane,—narcotics with their soothing influences come in to sustain the exhausted nervous system, and raise the sinking spirits, to a degree which, aside from their curative effects, renders their employment decidedly advantageous. We have however, in my own opinion, no legitimate right to regard any agent which brings even temporary relief to the desponding mind—

even though this relief result from an absence of thought, rather than from the exercise of emotions positively pleasing—as altogether destitute of remedial powers.

To furnish repose, and to kindle even for a few moments, the flame of hope in a mind over which the demon of darkness has long brooded, may, and does oftentimes, bring comfort which no language can adequately describe, and encourages the unhappy sufferer to make one more effort to escape his dreadful thraldom. His own, in connection with the exertions of those to whose enlightened sympathy and care he has been committed, often result in ultimate and complete restoration to reason, and sound bodily health.

In cases attended with a full habit, and considerable arterial reaction, narcotic and sedative agents, when deemed appropriate, are for a time, conjoined with nitre, ipecacuanha, or the antimonials; and cooling laxatives together with a restricted diet, are preferred to more direct depletion.

It is hardly necessary to add, that, while great caution is required in the use of depressing agents, inflammatory action is in every instance to be promptly met by the use of active and efficient depletion, both topical and general, commensurate with the severity of the case. The most intense nervous excitement however, which is sometimes mistaken for cerebral inflammation, can never require this treatment. It is in view of errors of this sort, that the general practitioner is recommended to guard against depletion and its too often disastrous consequences.

Of the medicines employed, the preparations of Iron, (usually the precipitated carbonate), and the sulphate of Quinine; Laudanum, the salts of Morphia, Conium, Hyoscyamus, Camphor and Stramonium, are the principal.

Conium, though largely employed in many Institutions, is at others regarded as inert, and therefore laid aside. We state the fact without assigning the reasons for such contradictory views; having seen none other offered, than such as grow out of an opposite experience in the use of this agent. With respect to Hyoscyamus, Stramonium and Camphor, little dependence is placed upon them, though they are sometimes employed. Valerian, in some of its forms is considerably used, and Asafœtida, or some Æthereal preparation occasionally.

Depraved or sluggish secretions, with torpor of the bowels, require the use of alterative medicine and laxatives. On no point are the profession more united, than in their opposition to prolonged purgation. Iron with Conium is, in many Institutions, very freely employed, sometimes in pills, but more generally in a liquid form.

The following combination has always been a favorite remedy with some, and is largely employed, with slight modifications, in several Institutions:

℞

Carb. Ferri Precipitat.		ʒxxx
Ext. Conii		ʒxv
Syr. Bals. Tolu.		ʒvi
Ol. Cinnamom.		
Ol. Limon.	āā	♏ xii
Alcohol		ʒii
Aquæ		Oi
Spt. Gallici Aut. Vin. Madei.		Oss
Sacchari		ʒiv

Mix.

Of this mixture, from half an ounce to an ounce and a half, is to be given three or four times a day. In every case, it is proper to begin with moderate doses of whatever agent or combination is employed, and increase it gradually, watching its effects. So insusceptible are many insane persons to the influence of narcotic and sedative agents, that they bear enormous doses of them, not only without injury, but sometimes with the most happy results. We have however, no means of ascertaining beforehand, who are,

and who are not easily affected by articles of this class. Hence the necessity of caution.

In addition to what has been said in regard to treatment, and the respective merits of remedial agents, it is our duty to state distinctly our belief, that not a few of those who are presented and received as persons requiring the benefits of an Institution for the insane, need, for their complete restoration, little else than the moral and restraining influences of these Establishments. They have no febrile symptoms to subdue, no special degree of prostration requiring support, no marked functional derangement of any organ or part to regulate; in a word, present no indications requiring the use of medicinal agents. They are nevertheless insane, and require treatment;—the peculiar treatment just referred to,—without which, the teachings of experience conduct to the inference, that they would, in most cases, never recover.]

HALLUCINATIONS.

Definition of, by Esquirol, Sauvages, Sagar, Darwin and other English physicians.—Illustrative cases, with treatment.—Post-mortem examinations.—Farther remarks on hallucinations.—How accounted for.—Distinction between hallucination, somnambulism, and ecstasy.—The convictions of the minds of the hallucinated entire, and their acts in accordance with them.—Case of a Jewess; post-mortem examination of.—Seat of hallucinations.—Darwin's and Foville's opinions respecting.—Subjects to which hallucinations usually relate.—Very common in insanity.—By some regarded as synonymous with vision.—How it differs therefrom.—Remarks on general treatment.

A PERSON is said to labor under a hallucination, *or to be a visionary*, who has a thorough conviction of the perception of a sensation, when no external object, suited to excite this sensation, has impressed the senses.

Sauvages has given the name of hallucination to those errors which result from a lesion of one of the senses; and when the sensations fail to produce that effect upon the mind, which they were accustomed to do before this lesion took place. Double vision, imperfect sight, ringing in the ears, are ranked by this nosologist in the first order of his division of the insane. But such errors and illusions as the other senses and the understanding are capable of correcting, should not be confounded with delirium.

Sagar denominates hallucinations, false perceptions, which form the first order of the Vesaniæ, of his Nosology. Linnæus places them in the order of diseases of the imagination. Cullen ranks them among local maladies.

Darwin, and after him the English physicians, have given the name of hallucination to the partial delirium which affects but a single sense; yet they employ it indifferently, as a synonym with delirium.

This symptom of delirium has been confounded by all authors with local lesions of the senses, with the vicious association of ideas, and in fine, with the influence of the imagination. It has been studied only when it related to ideas, which seemed to belong to the sense of sight; never, when it reproduced those appertaining to other senses. Nevertheless, considered in all its varieties, and to whatever sense it may relate, this symptom is very frequent. It is one of the elements of insanity, and may be met with in all the forms of this malady. The austere writings of every people, the history of magic and sorcery in every age, together with the annals of mental medicine, furnish numerous facts in relation to the subject of hallucinations. I have collected and published a great many of them. The following observations will exhibit hallucinations, as distinct as possible, from other symptoms of insanity.

M. N., aged 51 years, of a bilious sanguine temperament, having a large

head, short neck and flushed face, was, in 1812, prefect of a large city of Germany, the inhabitants of which rose upon the rear-guard of the French army, in its retreat. The disorder which resulted from these events, and the responsibility which rested upon the prefect, deprived him of the use of his reason. He considered himself accused of high treason, and consequently disgraced. In this state of mind he cut his throat with a razor. As soon as he had recovered his senses, he hears voices that accuse him. Cured of his wound, he hears the same voices, and persuades himself that he is surrounded with spies. He believes even that his domestics denounce him. These voices are continually repeating in his ear that he has betrayed his trust,—that he is dishonored, and that he can do nothing better than destroy himself. They employ in turn, all the languages of Europe, with which the sick man is conversant. A single one of these voices is understood less distinctly, because it borrows the Russian idiom, which M. N. employs with less facility than the others. Among these different voices, he hears very clearly that of a lady, who calls upon him to take courage, and entertain confidence. He goes aside often, the better to hear and understand. He questions and replies, provokes, challenges, and becomes angry, while addressing those persons who he believes are speaking to him. He is convinced that his enemies, by various means, can divine his most secret thoughts, and cause to befall him all the evils implied in the threats, reproaches and sinister opinions, with which they are overwhelming him. Aside from this, he reasons with perfect propriety, and all his intellectual faculties preserve their wonted integrity. He participates in conversation with the same degree of spirit, intelligence and readiness, as before his sickness.

Having retired to the country, M. N. passes the summer of 1812 at a Chateau, where he receives much company. If the conversation interests him, he no longer hears voices. If it languishes, he hears them imperfectly, quits society, and turns aside, the better to understand the sentiments which these perfidious voices express. He then becomes restless and gloomy. The following autumn he comes to Paris. The same symptoms beset him during his route, and are exasperated after his arrival. The same voices repeat; Slay thyself; thou canst not survive thy disgrace. No, no! replies the unfortunate man, I will not terminate my existence until I have been justified. I will not bequeath a dishonored memory to my daughter. He goes to the minister of police, who receives him with kindness, and endeavors to encourage him; but scarcely does he enter the street, before the voices assail him anew. I was invited to visit him, and found him walking with his only daughter in the court of the hotel where he lodged. His countenance was of a sallow hue, its expression restless, and his eyes haggard. I was received with politeness, but to all my questions received no other response than this; "I am not sick." On the following day my reception was the same. He said to me, "I need neither a physician nor a spy." He was agitated the remainder of the day, and conducted his daughter, 15 years of age, to the house of one of his friends. That night his disquietude was very great, attended with excitement, sleeplessness, thirst and constipation. The following day, M. N. went early to the prefecture of the police, where he declared that he had just settled a pension upon his daughter,—that he would not yield to his enraged enemies, who were endeavoring to persuade him to take his life, before he had fully justified himself,—that he had just made himself a prisoner, and must be judged forthwith. The same day he is committed to my care.

For more than a month, M. N. does not leave his apartment; sleeping none, eating very little, unwilling to receive any one, and walking with rapid strides, like a gloomy and restless man. Do we propose the use of remedies, he replies with an ironical smile. His politeness in other respects is perfect. His conversation is connected, very witty and sometimes gay; but he never be-

trays his secret—appears very much engrossed in thought, and particularly suspicious of those who serve him. During conversation, he is absent minded, and sometimes stops to hear, and replies briefly, with temper and even passion, to the pretended voices. After nearly two months, he appeared to wish that I should prolong my visits. It occurred to me to call the voices which pursue him, *babblers*. This word succeeds, and at my return he employs it, to express their dreadful importunity. I venture to speak to him respecting his disorder, and of the causes of its continuance. He relates much in detail what he has for a long time experienced, is a little more ready to listen to my reasoning, and discuss my objections. He refutes my opinion respecting the causes of these voices, and calls my attention to the fact that they were exhibiting at Paris, a woman said to be invisible, to whom they were accustomed to speak, and who replied at a distance. Such advances, said he, have been made in physics, that by the aid of instruments the voice may be transmitted very far. You have traveled, said I, a hundred leagues by post, and upon pavement, and the noise of your carriage would have prevented your *babblers* from being heard. Yes, doubtless, he replied, but by means of their instruments I heard them very distinctly.

The new political views, and the approach of foreign armies upon Paris, appeared to him fables, invented to get the better of his opinions. Suddenly, in the midst of one of our interviews, he said to me, raising his voice, and in a solemn tone; "Since it is your wish, listen to my profession of faith. The emperor has overwhelmed me with favors. I have served him with zeal and devotion. I have been wanting neither in duty nor honor. This I swear. Let him do with me what he pleases." Towards the end of March, 1814, after a long conversation, I invite M. N. to pay me a visit, in order to satisfy himself by examining my library, whether I was a physician. He declines; but three days after, thinking that he had taken me at unawares, he proposes to visit my study immediately. I accept the proposal. After having examined the books for a considerable time, he says; "If these books were not placed here expressly for me, this library is that of a physician." Some days afterwards, the siege of Paris takes place, but the patient remains convinced that it is not a battle, but merely an exercise with fire-arms. The king is proclaimed, and I send him the journals with the arms of France; he reads and returns them, adding; "these journals were printed expressly for me." I reply, that this would not only be very expensive, but very dangerous also. This argument does not change his mind. I propose, in order to convince him, to walk with him about the city, but he declines. On the 15th of April, "Let us go abroad," said he to me promptly, and without any suggestion on my part. In a moment we directed our steps to the Garden of Plants, where we found a large body of soldiers wearing the uniform of all nations. We had scarcely walked a hundred steps, when M. N. presses my arm violently, saying; Let us return, I have seen enough, you have not deceived me; I was sick, but am now cured. From that moment the *babblers* were silent, or were heard only in the morning, immediately after rising. My convalescent turned his attention from them, with the aid of the shortest conversation, by the perusal of a book for a few moments, or by a walk. At this time also, he regarded this symptom as I did myself. He looked upon it as a nervous phenomenon, and expressed his surprise at having so long been the dupe of it. He permitted the application of some leeches, employed the foot-bath, and drank some tumblers of purgative mineral water.

In the month of May, he goes into the country, where he enjoys perfect health notwithstanding the mortifications he experiences, and the affliction which the death of his only daughter occasioned. M. N. returns to his country in 1815, where he is again called to office.

This case offers the most striking example of uncomplicated hallucination

of hearing, that I have witnessed. Hallucination alone, characterized the cerebral affection of the patient. His disquietudes, suspicions and fears, were only the consequence of this phenomenon, which persisted for more than two months, although the convalescent had entirely recovered the free exercise of the understanding. Was this persistence occasioned by the force of habit?*

M. P., sixty years of age, belongs to a family distinguished in science, and was a very noted officer of the marine. He is of medium size, with a projecting forehead, and a largely developed occipital region. His hair is of a chesnut color, his eyes black, countenance pale, mind highly cultivated, disposition mild. In his youth, he indulged in masturbation, and one of his brothers committed suicide.

M. P. at the age of 30 years, made the campaign of 1807 in Prussia, in the capacity of an officer of marine. He remained for a long period in a cantonment that was extremely humid, and in consequence was seized with intermittent fever, attended by delirium. At the age of 31 years, while on leave of absence on account of his health, he was married to a charming lady, and introduced to a family in which he was treated as a son. Shortly after, he is seized with delirium, and attempts to commit suicide. Committed to my care, he is restored in three months. On his return to his family, he is the happiest of men. He returns to the army, with the rank of Lieutenant of the marine guard, and makes the campaigns of 1810 and 1811. In July of the latter year, in consequence of an excitement resulting from an act of injustice, he suffers from a return of delirium, which terminates with the year. In the campaign of 1814, M. P. is named chief of the squadron of the marine guard. Soon after, a new attack is provoked by the abdication of Bonaparte. In 1815 he returns to duty during the hundred days, in opposition to the advice of the family of his wife. After the second abdication, M. P., seized anew, takes up a frightful aversion to his wife and her family, who were previously the objects of his strongest regard. Nothing removes this dislike. He deserts his adopted family, and makes the journey to Rome, afoot and alone, impelled by religious considerations. Scarcely has he set foot upon the soil of Italy, than, one day, overcome by fatigue, he sits down upon a rock, and experiences an extraordinary visitation. God appears to him, and he has a vision for the first time. From henceforth, he believes that he is followed by his father-in-law, who throws in his way every possible obstacle to the accomplishment of his journey. He sees, hears, and contends with him. Nevertheless, he reaches his place of destination. Having returned to France, he is placed in the hospital at Avignon, where he permits his beard to grow, neglects the most ordinary attentions which propriety requires, imposes fasts upon himself, engages in no occupation, and employs no means of diverting his mind.

I visited this hospital in 1821. M. P. remembers and accosts me with much satisfaction. He makes many enquiries about my health, and respecting several persons whom he knew when under my care, eleven years before. On being brought again to Paris, M. P. enters at Charenton, in 1825. His delirium is religious and mystical. A thousand hallucinations and illusions of the senses make light of his reason, and he believes also, that he has immediate communications with God. The Son of God sometimes appears to him; and he sees him borne upon clouds, surrounded by his angels, with a cup in his hand. *He communicates his orders to his humble servant P., not by words, but by signs which appear in the air.* He attempts nothing, without consulting the *God of Heaven.* He repeats passages of the Bible, from

* This case was previously referred to, but the details of it, which we have recorded, appeared to me of so much interest, that I could not pass it over in silence.

the gospels, which he opposes to the observations which are made to him with respect to his hallucinations and illusions. *God expresses himself thus in the Holy Scriptures*, says he, citing the verse. Having unduly prolonged the fast, during the season of Lent, in 1827, M. P. was taken sick. I ordered his food to be increased; but he obeyed not, until he had weighed the matter carefully in his mind, had consulted God, and received orders from above, to comply with my request. He often said to me, in our interviews; "*Formerly I believed not in God; I was in darkness; but since I have exercised faith, God has given me light.*" He is constantly in the gardens, contemplating the heavens and the clouds, with a blank book and crayon in his hand. He traces the symbolical figures, which he sees in the sky. These are, at one time, geometrical figures; at others, animals, household utensils, flowers, instruments of music, and agricultural implements. Again, they are strange figures which resemble nothing. These signs are, moreover, for the instruction of men; *for the scripture saith, there shall be signs in heaven.* He has seen all things created, and understands the creation, and the signs which he beholds. He wishes also to explain them, and in his explications, religion and politics are constantly blended. He designs all his visions, and writes out their explanations. Usually M. P. is calm, polite and amiable. If he speaks of his visions, a smile is upon his lips, and his language is mild. He expresses himself without excitement, and his terms are very well chosen. If we persist in opposing him at any time, his eyes become animated, his look is upward upon the clouds, and his face flushed, but never connected with uncontrollable excitement. He wears the appearance of a person in the higher walks of life; in person is moderately full, and his hair is white; his appetite and rest are good. He lives retired, and has habitually a pompous air; says little, and never disputes. I have often spoken to him of his wife and family, in order to recall his former affections. They wished me, says he, to deny the faith. They are the enemies of God, and I renounce them. His costume is strange, in consequence of the variety of its colors.

We shall not read without interest, an account of the peculiar hallucinations of a distinguished officer of marine, who has been at Charenton for eleven or twelve years. His religious monomania is carried to excess. At the age of fifty he is controlled by ideas of a mystical and punitive character. He desires to fast, goes about with naked feet, divests himself of his clothing, and prostrates himself upon the floor of his chamber. Though usually tranquil, he has had several attacks of madness, which have been caused by refusing him permission to go to Brest, to rejoin the service. In the spring of 1836, M. H. sent to me several detached sheets, upon which he had written down his hallucinations. The following are certain passages taken from them.

First sheet: "In the name of the Father, of the Son, and of the Holy Ghost.

"Signs of visions, which foretell the reign of God and the coming of N. S. J. C.

"For many years, extraordinary events have been taking place in heaven and upon earth. The reign of God and the coming of N. S. J. C. are near. God has favored me with many visions which prove it. It is more particularly within the last years, that I have enjoyed the privilege of seeing God, and many of those dwelling in Heaven.

"How much do I know!

"At Orient, in Oct. 1821, about midnight, I heard a loud voice proceeding from heaven, which uttered words which I cannot repeat, for I did not comprehend them. A little after, I heard a loud cry, and saw demons, who were suffering the chastisements of God. On hearing this voice I arose hastily and prayed. The next day I gave my money to the poor. Some days after, be-

fore sun-rising, I saw in the east, the triangle, emblematic of its divinities. I spoke of it to many persons, but my conduct was not at that time sufficiently religious, to secure credence to my report. I should have prayed and repented, but I did it not. It was not until many years afterwards, that I began to instruct myself in matters of religion. I attended mass but little, from shame. I have now overcome this diffidence, and have repented." T. H.

Second sheet: "In the name of the Father, etc.

"Signs and visions, etc., in 1829.

"At the close of the month of June, during the night, a man appeared over France; the presence of God was very striking, and I heard some one say, is this the end of the world? it seems that it may be so. Men had fears, and many were troubled. At day-light, the most perfect calm prevailed. A few days afterwards I saw persons who hastened over one portion of the sky, with armed men. Their march was rapid, and this circuit appeared to be made for the purpose of warning men both in heaven and on earth, for I saw them in different regions, and in many places. During the whole summer I saw angels and saints, in many of the abodes in the heavens. I saw God the Father on several occasions, who condescended to speak to me. The first time, he was surrounded with great power, and the heavens were clothed in brightness. I saw surrounding him, the light of worlds, which before appeared shrouded in darkness. He afterwards enters divers hells, where he slew several monstrous beasts, and filled up those places, from which I believed false oracles emanated. His power was every where present, and the heavens were shaken by it. Many times I saw John the Baptist in heaven, in a chariot drawn by seven horses, from whence I believe he was preparing with angels, the events that are to precede the coming of Christ. I pray you to believe that my visions are true."

Here follows the signature, T. H.

I suppress the other sheets. Sometimes the ideas contained in them are not more connected nor more rational than those which are to be found above. For example, he closes one sheet with this reflection: "I believe that Js. Ch. will come, because he has several times been tempted. I pray all the faithful to intercede in my behalf."

Madame de S., of medium size, of spare habit, having chesnut colored hair and blue eyes, is endowed with remarkable susceptibility, and with a lively and very amiable disposition. She menstruated for the first time at 14 years of age. She has always enjoyed delicate health, but has been exempt from grave maladies. Married at twenty-one years of age, she became pregnant at twenty-three, and was happily confined. She did not nurse. Three months after her confinement she had an intestinal affection, which persisted notwithstanding a hemorrhoidal discharge. At thirty-one years of age,a second pregnancy occurs, during which her disposition becomes sour and capricious. She is confined at term, and without accident; nurses her infant, and is restored to her former agreeable disposition. Lactation debilitated Mad'e S., and the abdominal affection became grave. At thirty-eight years of age, her devotional feelings became exalted. She indulged in mystical notions, and persuaded herself that she ought to live with her husband, with the view only of training up her family according to the commands of God, and charging him with being too worldly in his views. Nevertheless she became pregnant the third time, and was happily delivered. Some months after its birth, the child died. She had lavished upon it the attentions which excessive tenderness inspired, because, said she, this child was born after holy visions. To the most poignant grief, succeeded calmness and tranquillity. Her mystical views were dissipated, and from the age of forty years she enjoyed perfect health until forty-six, when she lost her eldest daughter, who had recently married. Although filled with despair at this misfortune, she put on

an air of much resignation, in order to sustain the spirits of her husband, who was overwhelmed by this affliction. She returns to her religious readings with more ardor than ever. She read also several of those pretended political prophecies, which were abroad in the world. These diverse readings, made a strong impression upon her mind. She lost both her appetite and rest; and after the month of January, 1817, often spoke of the events foretold with respect to France. At length, in the beginning of March following, she was present at the anniversary service of the death of her daughter. She remains sad, dejected and silent; without appetite or sleep. Suddenly, on the fifth of March, amidst cries, complaints, convulsions and loquacity, she speaks without ceasing of God, who announces to her extraordinary events.

Heaven had been opened to her view. She had seen her daughter there, who had informed her that France was about to become subject to a reign of grace and justice,—that a Messiah was about to appear, to put himself at the head of his church and government, and that all the world would hereafter be happy. This state of mind persisted for seven hours, and when restored to the use of her reason, it was proposed to her to visit Paris for her health. This she obstinately refused to do. As soon however as she was told that God commanded it, she immediately descended from her apartment, entered her carriage without opposition, and arrived on the sixth, at Paris. On the seventh of March, a new crisis occurred, attended by cries, convulsions and hallucinations, together with efforts to escape from her husband and female attendant. She repulses them, both by her menaces and language; and beats them both, regarding them as devils. Isolation renders her more tranquil, but not more rational. She is in despair that the devil should assume the form and appearance of her husband, the person whom she loves better than all others. She goes readily to the house of M. Pinel, because this celebrated man ought to be as well informed as herself with respect to whatever is to happen. She is committed to my care. From the first, the new habitation, and the strange persons who surrounded the patient, impressed her to such a degree, that she did not for a moment, betray the thoughts, which had preoccupied her mind. She manifested no anxiety at the absence of her husband, nor any uneasiness on finding herself among strangers. This change of situation, is the fulfilment of the command of God.

The next day, the eighth, Mad'e S. expresses a degree of confidence in me, and I endeavor to make her comprehend how contrary to the truth her convictions are, and to impress upon her mind the true object of her stay in Paris. She smiles at my error, and with much kind feeling, recommends me to prepare for great events. Otherwise, she is tranquil, says little, never speaks foolishly, but sometimes laughs without cause. She also makes one at a game of cards in the evening. She refuses all medicine. On the tenth, after a long conversation, in which for the first time, she relates all that she has seen or heard, as well as what she has discovered in the Holy Scriptures; after a discussion of sufficient length, she consents to make with me, the following treaty, which I record, and which is signed by both of us. By the terms of this agreement, the patient consents to be regarded as insane, and to submit to the treatment that is prescribed for her, if the Messiah does not appear before or upon the twenty-fifth of March, and great events do not take place at this period. From that day, she is not only calm, but gay; converses voluntarily, speaks to no one respecting what is passing in her mind, and sustains conversation with spirit, and upon every variety of subject. With myself only does she sometimes hazard a few words upon her prophesies, and then only, from her interest in my future well being. The twenty-fifth of March passes by. On the day following, I require the execution of the agreement. she submits with the best grace, and testifies a strong desire to see her hus-

band once more. She sees him on the following day, and appears to us all so rational, that she is permitted to return immediately to her province. The convictions of this lady are not entirely removed, but very much weakened. Having reached home, she resumes her former habits of life, as well in her family as abroad. No one would have supposed that she had been sick, and in a very short period the last traces of her malady are completely effaced.

Madame R. a seamstress, aged forty-four years, is tall, and of a spare habit; has chesnut colored hair, eyes hazel and lively, face flushed. Her temperament is sanguine, she enjoys very good health, and is of an animated disposition; but obstinate and choleric. At nineteen years of age, menstruation takes place, preceded by violent attacks of cholic. At twenty-two she is married, is seven times pregnant, and has three abortions. At thirty years of age, while nursing, she engages in a dispute, and has a fit of anger. The secretion of milk is checked, and a tranquil delirium follows, which persists for eighteen months; after which she once more enjoyed good health. At forty-one years of age, whilst walking in the street, during the period of menstruation, she is thoroughly wet by a pot of warm lye. A suppression of the menses immediately took place, which did not afterwards appear. From this time, she suffers from headaches, increases her expenses, purchases articles of little use in her family, disputes and quarrels on the subject of politics. Her disposition also becomes more irritable and passionate.

At forty-four years of age, she has a dispute, which is attended by an attack of anger. From that evening she suffers from nervous agitation and delirium. She breaks the windows of her neighbors, is arrested and sent to the police office, where she is condemned to pay for the glass she has broken. A new attack of anger supervenes, attended with violent delirium, extreme agitation and loquacity; she cries, sings, dances, etc. She is brought to Charenton, and remains there for five months, in a state of acute mania. Transferred to the Salpêtrière on the 19th Nov. 1816, the patient is not habitually irrational, but in a state of constant agitation, talks incessantly, tears her clothing, and torments her companions. Though generally gay, she sometimes weeps. She suffers from insomnia, and constipation. She dresses herself in a peculiar manner, and mentions to any one who wishes to hear her, with the most perfect coolness, and in a tone of the deepest conviction, that there is at Charenton a boarder whom Jesus Christ has come to visit, and who pays 3000 francs for her board. Whilst our patient was in this hospital, she also saw Jesus Christ. His stature was tall, and his hair brown; a singular fact, she adds, as he is represented in paintings as having flaxen hair, but perhaps it was so in his infancy. Jesus Christ has a fine figure, a pretty mouth, and handsome teeth,—his voice and language are mild. He has announced to our patient, that there is to be no cold during the winter,—that he will punish the Jacobins, by inundating their houses. He appeared to her as a spirit, that others might not see him. He was accustomed to come and take her by the arm and conduct her to a yellow chapel situated in the garden. He has many times stated to her that there would be no more wars, nor misfortunes, the people being converted. Since she has been at the Salpêtrière, Jesus Christ has visited her every evening, and has promised that there should be an early and abundant harvest, the rents of which shall be her own. He has addressed to her several letters, (which she has in her possession but will show them to no one). He sends into her cell the sweetest odors of jasmine and orange—upon its walls, he has caused to be painted landscapes and distant views, and illuminates it every evening, with the most brilliant stars. Our patient alone has the privilege, either to see, or appreciate these delightful things.

Mad'lle C. tall and of a slender form, with black hair and large black eyes, skin dark and swarthy, bilious-nervous temperament, and delicate lungs, is endowed with a lively disposition, and an ardent imagination. At the close of

her first year, she had variola. At twelve years of age, menstruation took place, preceding by three months an attack of chlorosis; since which, the menses have been both scanty and irregular. At fourteen years of age she became enamored of a young man with whom she had been brought up. He dies; and Mad'lle C., who was at this time sixteen years old, becomes melancholic, refuses food, and passes several days, at various periods, without taking the least nourishment. She has since been subject to headaches, pains in the stomach, sleeps little, and is often awoke by nightmare. She has convulsions and syncopes on the slightest opposition, especially after her meals. When seventeen years of age, the passion of love was again revived in her heart; and melancholy, together with her other nervous symptoms, disappeared. Her health appeared to be excellent. At eighteen years of age she loses her parents, and is left without either resources or a guide. To this misfortune, loss of appetite succeeds, and the menses become more irregular. Melancholy returns, attended with a desire for death, and joy at the thought that she shall very soon rejoin her parents. At length delirium supervenes, continuing from five to seven hours every day. In the intervals, she refuses to eat, emaciation takes place, attended by a pulmonary catarrh, to which leucorrhœa succeeds, and an intermittent fever, at first tertian, then quartan, and afterwards quotidian, with delirium during the attacks. The patient sees her deceased parents at her side, which produces the deepest despair. Some friends, in the hope of consoling her, offer her religious advice, which she puts in practice. But at twenty-one years of age, thwarted in her inclinations, she relapses into her former grief and despondency, feels herself overwhelmed by the loss of her parents and her excessive misery. It was at this time, that being at church, the Holy virgin appeared to our patient, sitting near to God, offering her consolation, and assuring her that she should take her under her own protection. The same apparition appeared every day during the delirium of the intermittent fever, and persisted for more than a year.

At the age of twenty-three years, perceiving the interest of her lover lessening, she is seized with grief; wishes to die, and refuses nourishment. After fifteen days' abstinence, she falls into a state which she cannot describe. Nevertheless, she with great difficulty gets to the church, and while engaged in prayer, notwithstanding her bodily infirmities, and the tumult of her passions and ideas, God appears to her, and demands of her, in a piercing tone, her motive for self-destruction. "*Because I am overwhelmed with sorrow*," she replied. After a long interview, God commands her to live, notwithstanding all the sufferings which yet await her. He requires of her an oath, that she will not endeavor to destroy herself. She takes this oath; and it is remarkable that though she has since experienced many reverses and mortifications, together with two attacks of lypemania, attended with a suicidal impulse, our patient has ever strictly regarded it. When twenty-five and a half years old she leaves her province, comes to Paris, and gives herself up to libertinism, with all the passion of one possessed of an ardent temperament and vivid imagination. Soon after, she becomes pregnant, and grieves much. During her pregnancy she has fainting turns every day, and becomes dropsical. Nevertheless her confinement is fortunate. From that period, she enjoyed miserable health, and believed she was going to die. Besides, she desires death as an end to her sufferings. At twenty-nine years she becomes pregnant a second time. During her pregnancy she suffers greatly, has violent paroxysms of cholic, but a happy confinement. She leaves the Maternité ten days afterwards. Having returned to her house, alone, forsaken, and without resources, she was plunged into the most profound misery. Suffering, and overwhelmed with mortification, she labors night and day, to obtain a subsistence. But her feeble and suffering condition, prevented her from procuring wherewith to live. She betakes herself to the church, and

there for three hours prays to God, promising to go forth, confess herself, and be converted. She leaves the church with more courage and resolution, and sets herself to work with increased ardor. A few days after she was seized with a fever, and for several days took no food. She then, as she had formerly done, sees God, who appeared to her at eight o'clock in the morning. She is transported to the sixth heaven; sees things more beautiful than she can describe, and the recollection of which still fills her soul with inexpressible delight. This rapturous frame continues for more than nine hours. God appeared to her at several other periods. Jesus Christ visits her more frequently, gives her advice, and commands her to address the people. She passes several days without eating, because, being in communication with God, she thinks herself able to do so. She wishes to labor, but is unable to effect her purpose in this respect, notwithstanding her great necessity.

She has the same visions for three successive weeks. On the 28th of April she becomes very much agitated. On the 30th, she sings at the window of her chamber, and in the evening, declaims, announcing woes to the people; speaking in turn of the impropriety of her past conduct, and of her present virtue and penitence. She arms herself with whatever comes to hand, threatening to exterminate those who approach her, and whom she treats as profane persons. Turning against her acquaintances who press around her, anxious to lend their assistance, she repulses them with horror. Her own sister is repelled with contempt and rage. On the 1st of May, a physician having come to visit her, she commands him to announce, in the name of God, the evils that threaten France. Her agitation and the perversion of her ideas are at their height. On the 3d of May she is sent to the Hôtel-Dieu, from whence she is transferred to the Salpêtrière. At the period of her arrival, the 5th of May, she sings and talks incessantly, and holds religious discourses, mingled with some degree of obscenity. She is emaciated, her complexion sallow, her skin hot, and tongue red. She is anxious to perform miracles and to cure all that are sick. Tepid baths, diluent drinks, pediluvia, etc., are prescribed. On the 15th there is general delirium, agitation, loquacity, cries and songs. On the 17th, all the symptoms are exasperated, the menstrual flow takes place, and the discharge is abundant. On the 30th of May, there is an alternation of agitation and repose. God has commanded her to warn the Emperor,—she knows those who are to betray him, and will denounce them. She is acquainted also with the expenditures of the State, and those who are to ruin it. She speaks with haughtiness and pride, and in threatening language. Her countenance is very much flushed, she is greatly agitated, walks about rapidly, spits often, and suffers from constipation and insomnia. At the end of June the menses return; in July the same. Continuation of tepid baths, cold lotions to the head, and cooling drinks. August: calm and patient; replies correctly to questions that are addressed to her. September: sleeps; return of reason, convalescence, cephalalgia. December: health perfect, and she gives an account of her delirium. God appeared to her very often during her last attack, spoke to her, and unfolded to her the future. He had the form of a venerable old man, clad in a long, white robe. During the following winter her health continues good, and she leaves the hospital April 13th, 1815.

Scarcely has she departed, when, finding herself in the same state of abandonment and destitution as formerly, the same emotions and ideas also return. Our patient is seized with the desire of announcing to Napoleon, what God had commanded her to say. She attempted often to penetrate even to the interior of the Tuileries. Not succeeding in this, she wrote a letter which she addresses to the Emperor, and another to the high chancellor, demanding of him the means of enabling her to reach Napoleon. I have still in my possession the reply of the high chancellor, but the patient dared not execute the instructions therein contained. At the review which precedes the de-

parture for Waterloo, she forces the ranks, and commits with dignity to the hands of an officer a packet of letters, to the address of Bonaparte. Supposing that at length her counsels have succeeded, she believes that she has saved France. She is composed for some time. But calamity pursues her at every step; and finding no occupation, she relapses again into lypemania. She desires to destroy herself, and many times goes to the river for this purpose. But the recollection of the oath which she took at the age of twenty-three, restrains her. She reënters the Salpêtrière on the 21st of June, 1815, in a most deplorable state, especially with respect to her physical condition. Milk, together with sufficient nourishment, tepid baths, and cooling drinks with gentle laxatives, promptly restore the vital forces. In the month of August the patient is better and begins to labor. In the month of September the menses are reëstablished, the delirium has ceased, and cheerfulness is restored. During the winter she is affected with cephalalgia and scurvy. For one year this woman, aged thirty-three years, was employed in the service of the division for the insane, and enjoyed her reason perfectly. But her disposition is very irritable, and she is capricious and erotic. She remains so fully convinced of the truth of what was announced to her, that she said to me one day, (1817); "I shall be insane for two years more, until time has proved that all that has been predicted to me is only insanity and error." In 1819, she wrote with her own hand a long history of her physical, intellectual and moral infirmities, from which the extract I have just given was taken.

M. D., doctor in medicine, tall, of a strong constitution and sanguine temperament, having a voluminious head, forehead very bare, projecting more on one side than the other, with blue eyes, flushed face, and having a violent and obstinate disposition; is an ultra partisan of the doctrine called physiological. He does not content himself with spreading abroad this doctrine by his opinions and writings, but wishes to advance it also by his example. He bleeds himself from time to time, subjects himself to an abstemious diet, and bathes frequently. He had challenged to a duel his associates, who, in consultation did not partake of his medical opinions. Thirty-six years of age (Aug. 1822): paralysis of one eye, and of one of the commissures of the lips, with transient delirium. Thirty-eight years of age (Sept. 1824): after a violent contest, which took place at a consultation, he was suddenly seized with delirium and a nervous agitation. Having returned home, M. D. is desirous to bleed his wife, children and domestics, and takes from himself several pounds of blood. From this time, he suffers from inappetence, sleeplessness, extreme turbulence, entire incoherence of ideas, and hallucinations. Eight days afterwards, he is brought to Charenton. At the time of his arrival his agitation is very great, and his loquacity continual. The patient pretends to recognize every one, and treats the attendants haughtily and in a passionate manner. He experiences hallucinations of hearing and of sight, —has a consciousness of his condition, and reasons justly. Towards the end of the month he becomes furious, and threatens to slay all who approach him. Forty years of age (Oct. 1826): M. D. believes he sees a patient of the house insult and violate his wife. In a furious passion he throws himself upon the innocent object of his wrath, and injures him most seriously. Forty-one years of age (April, 1827). He has had several attacks of intermittent fever, which seem to compose him without lessening the delirium.

When the medical service of the maison royale at Charenton devolved on me, the condition of M. D. had not changed. His physical condition was good. On seeing him for the first time he appeared contented, and testified much confidence in me; but although he always expressed the same sentiments towards me, and pretended to feel great deference for me, I could never induce him to pursue a regimen and to take remedies appropriate

to his condition. I earnestly desired to contribute to his cure, and paid him particular attention. Nothing however could induce him to lay aside his hallucinations, nor could any thing control his medical exaggerations. He often requested me to order him to be bled. My refusals, the motives to which I endeavored to explain, did not discourage him. His entreaties were most urgent during the summer of 1827. At length, after many evasive replies, I yielded, hoping to strengthen the confidence of the patient, and to make myself master of his reason. It was agreed between us that we should employ a small bleeding by way of experiment. It was performed one day during the month of October. Scarcely had the pupil who performed the duty retired, than our enthusiast removed the bandage, and fills with blood a chamber pot, a tin wash hand basin, bleeds a large quantity upon the floor of his chamber, and feeling enfeebled, reclines upon his bed, where he loses still more. Attracted by a slight plaintive noise, the attendant hastens thither and finds him extended upon his bed, and almost without life. The pupils, on being informed, find in turn the patient without pulse or respiration; his face pale, eyes glazed, limbs flaccid, and regard him as dead. Nevertheless, they employ frictions, at first dry, then of aromatics and alcohol. They employ irritant frictions on different regions of the body. The patient is also enveloped in wool. After long and painful efforts, the respiration becomes discernible, the pulse perceptible, and a few drops of liquid are conveyed to the stomach. After some hours spent in attentions of this nature, the patient seems to revive; pronounces some words, but is voiceless. By degrees, the vital forces are reëstablished, the voice returns, and the senses resume their functions, excepting that of sight. The patient remains blind. As soon as he could describe his feelings, (which was only after the expiration of several days), he declares himself well, with the exception of a slight weakness. He manifests no regret at his loss of sight, assuring us that it will return. Notwithstanding his anæmic condition, which continues for several months, and the privation of sight, the delirium undergoes no change. His hallucinations are equally intense and coherent. Their character also remains the same, and he is incessantly excited by those of sight and hearing. The patient is perpetually in conversation with persons whom he sees and hears. Habitually contented and happy, he often laughs aloud, applauds and claps his hands. He never complains of his situation. He remains exceedingly irritable, ready to fall into a passion on the least contradiction. All the functions of nutrition are well performed; yet he sleeps little, and takes little exercise; doubtless in consequence of his recent infirmity. This state persists with little variation for several years.

Forty-two years of age (1828): Intestinal catarrh, attended with a very abundant discharge of mucus, which much enfeebles the patient. Forty-nine years of age (June, 1835): During the night, cerebral congestion takes place. At my visit on the following day, the lips are found to deviate towards the left, and the sensibility is obtuse. It is necessary to pinch the skin violently to produce pain, and the hearing is very much enfeebled. We notice many breaks in the pronunciation of words. The face is pale, the eyes bedewed with tears, the pulse strong, frequent and regular. The skin is warm, and the patient somnolent. He expectorates copiously, and is constipated. This condition is not of long duration. From this period, intelligence is enfeebled, the patient is less gay, and his gayety is of a less blustering character. He both hears and understands with more difficulty, and does not so readily recognize by the voice the persons who approach him. He lies most of the time upon his bed, and has no regard to propriety. He has little appetite, and sometimes refuses nourishment. Digestion also is imperfectly performed. He becomes emaciated, and is affected with a diarrhœa, but the hallucinations and delirium persist. Fifty years of age (16th March, 1836):

After several days of prostration of the vital forces, and diarrhœa, the dejections become involuntary. He remains drawn up in bed, is no longer heard to speak,—becomes speechless and dies.

Seventeenth March, 1836: Autopsy. The cranium is found to be spongy, and a serous discharge takes place on opening the arachnoid membrane. A few lines from the apophysis of the *crista galli*, an ossification presents itself. It is of a conoidal form, oval, two lines in thickness, and an inch and a half in circumference. It adheres by its base, to that portion of the dura-mater, which forms the fold of the great falx. The arachnoid is infiltrated, thickened, and opake in some points. There are also points of adherence between the pia-mater and the cortical substance of the brain. These adhesions, which are very numerous at the base of the brain, are of greater extent at the superior region of the hemispheres, especially in front. On removing these adhesions, the cortical substance has an ulcerated appearance. It is also red. In those portions where the dura-mater has not formed adhesions, the cortical substance presents a silvery-grey aspect. If we scrape it with the back of the scalpel, it breaks into numerous fragments, and that portion which remains adherent to the grey substance, seems to be ulcerated, as I remarked above. The origin of the seventh pair of nerves, presents nothing special. The optic nerves are greyish, and present the color and transparency of wet parchment. They are flattened and atrophied. Stripped of the neurilema, they are firm, consistent and greyish. This color and consistence extends even to their connection with the optic thalami. These, when laid open, present nothing remarkable. The white substance of the brain presents numerous vessels, from which escape drops of serous blood. The color of this organ is dull, slightly shaded, violet colored in some portions, and its consistence is generally more firm than in the natural state. The grey substance of the interior of the brain is of a rose color. The cerebellum, cerebral peduncles, tuber annulare, the medulla oblongata and spinalis appear in their normal state.

From these facts, and from all that we can gather from the annals of the infirmities and diseases of the human mind, we may conclude that there exists a certain form of delirium in which individuals believe that they perceive, sometimes by one sense, sometimes by another, and sometimes by several at once, while no external object is present to excite any sensation whatever. Thus, a man in a state of delirium hears persons address him, asks questions, replies, holds a continued conversation; distinguishes very clearly reproaches, abuse, threats and commands which are addressed to him,—discusses questions, is vexed, and falls into a passion. He hears also celestial harmonies; the songs of birds, a concert of voices, and this, when no voice is near, and a profound silence reigns around. Another sees pictures most varied in character, and most animated in expression. Heaven opens, and he contemplates God face to face, takes part in exercises of the Sabbath, and rejoices at the sight of a beautiful painting, of a fine exhibition, and on beholding a friend. He is frightened at the sight of a precipice, of flames ready to consume him, of enemies armed to assassinate him, and of serpents who would devour him. Yet this wretched man is in the deepest darkness. He is deprived of sight.

One insane person thinks he sees a shining chariot, which is going to convey him to heaven. He opens his window, advances gravely to enter it, and falls to the ground. Darwin relates the case of a student at Berlin, who, previous to the period referred to, had enjoyed good health. This young man entered his house in an extreme fright, his countenance pale, his eyes wandering, and assuring his companions at the same time that he should die in thirty-six hours. He retires to bed, orders a minister to be sent for to reconcile him to his God, and makes his will. His symptoms, in appearance grave,

alarm his comrades. Hufeland visits the patient, but his reasonings do not convince him. This celebrated physician orders a dose of opium, which produces a profound sleep, which is prolonged much beyond the thirty-six hours. On waking, they succeed in proving to the patient that he has been the sport of his imagination. When fully convinced, composure returns to his mind, his fears are entirely dissipated, his usual cheerfulness returns, and he confesses, that having gone out of the city at the dusk of evening, he saw a death's head, and heard a voice saying; "Thou shalt die in thirty-six hours."

One laboring under a hallucination, desires that certain odors which annoy him should be removed, or else he smells those of the sweetest character, while there is not at hand any odoriferous body. Before his sickness he was deprived of the sense of smell. Another believes that he chews bloody flesh, grinds arsenic, and devours earth: sulphur and flame set his mouth on fire. He also quaffs nectar and ambrosia. A melancholic sees bees constantly issuing from his mouth. A maniac, hearing the roar of thunder, exclaimed; "a thunderbolt has fallen upon my head, without injuring me." He believed that he slept with several women successively; conversed as if they had been present, praising one for her promptitude, chiding another for her delay, and addressing each in a manner suited to her character. Now he was gay; often jealous, sometimes choleric. While walking in the garden, this patient was accustomed to believe that he was present at a feast, and was in raptures at the delicacy and variety of the dishes that he smelled. It is the hallucinated who experience asperities, points, and arms which wound and lacerate them, whilst lying upon a soft bed. They are carried far away, and think that they hold in their hands bodies which are not in their possession. Some monomaniacs and epileptics, at the commencement of their attacks, believe that they are struck and beaten. They display their bodies which they believe have been greatly injured by the cruel blows which they have received. A general believed that he had hold of a robber, and shook his arms violently, as if he had hold of some one whom he wished to throw upon the ground.

In general, these individuals believe that both persons and things are present with them, which can have no real existence, except in their own imaginations; at least, so far as they are concerned. The evidence of the senses, passes for nothing in this form of delirium. This class of patients have to contest every thing with the external world. They are in a state of hallucination. Such are the hallucinated. The phenomena of hallucination are not like those which result from delirium. In the latter, sensations become modified and changed, so that the perceptions of the patient are no longer what they were before his illness, nor like those of other men. Notions relative to the qualities and properties of things, and of persons, are imperfectly perceived, and the judgment in respect to them consequently incorrect. The insane man mistakes a windmill for a man; a hole for a precipice; and clouds for a body of cavalry. In the last case the perceptions are incomplete; hence an error. The ideas and actual sensations are but imperfectly connected. In hallucinations, sensation and perception no more exist than in reveries and somnambulism, since external objects do not act upon the senses. A thousand hallucinations sport with and mislead the mind. In fact, hallucination is a cerebral or mental phenomenon, which is produced independently of the senses. It persists, although delirium may have ceased, and reciprocally. The history of many celebrated men confirms this view, and proves that a man may be subject to hallucinations without delirium. The first observation furnishes a very remarkable example in illustration of this opinion.*

The most rational man, if he will observe carefully the operations of his

* M. Lelut reports several cases of hallucination without delirium, in his work: "*The Demon of Socrates.*"

mind, will sometimes perceive images and ideas the most extravagant, or associated in the strangest manner. The ordinary occupations of life, the labors of the mind and reason, divert the attention from those ideas, images and phantoms. But he who labors under a delirium,—who raves; unable to command his attention, can neither direct it nor turn it aside from these imaginary objects. He remains the slave of his hallucinations and reveries. The habit of always associating the sensation with the external object that solicits and usually calls it into exercise, lends a reality to the productions of the imagination or memory, and persuades the subject of hallucinations that what he actually experiences could never occur, without the presence of external bodies. The pretended sensations of the hallucinated, are the images and ideas reproduced by the memory, associated by the imagination,—and personified by habit. Man then gives a form to the offspring of his mind. He dreams, while fully awake. In a case of revery, the ideas of the waking hours continue during sleep; whilst he who is in a complete delirium is in a revery, though awake. Reveries, like hallucinations, always reproduce former sensations and ideas. As in a revery, the series of images and ideas in hallucinations is sometimes regular; but more frequently they are reproduced in the greatest confusion and present the strangest associations. The hallucinated are sometimes conscious, as is the case also in a revery, that they are in a delirium, without the power to disengage the mind. He who is in a revery, as well as he who has hallucinations, is never astonished nor surprised at the ideas or images which occupy his mind, whilst they would have excited the greatest wonder had the patient been fully aroused, or had he not been delirious. This phenomenon, in either case, is caused by the absence of every accessory idea, and every foreign impression, with which he who labors under either of these forms of disease can compare the objects of his revery or delirium. The thinking faculty is altogether absorbed by these objects. The difference between the hallucinated and somnambulists consists in this; that in the greater number of cases the former recall whatever has preoccupied or troubled their mind, while the latter remember nothing. Hallucinations differ from ecstasy in this only, that the latter condition is always produced by a powerful effort of the attention, fixed upon a single object, towards which the imagination of the person affected constantly tends. In ecstasy, the concentration of innervation is so strong, that it absorbs all the powers of life, and the exercise of all the functions is suspended, except that of the imagination.

In hallucinations, on the contrary, for the augmented action of the centre of sensibility, a violent effort of attention is not necessary. All the functions are performed with more or less freedom; the man lives amid his hallucinations as he would have done in a world of realities. The conviction of the hallucinated is so entire and sincere, that they reason, judge and decide with reference to their hallucinations. They also arrange, with reference to this psychological phenomenon, their thoughts, desires, will and actions. At a time when it was customary to burn sorcerers, and those possessed of demons, they have been seen to throw themselves upon their funeral pile, rather than deny that they had engaged in religious exercises. I have known persons who had been cured of their hallucinations, who were accustomed to remark, "I saw and heard, when laboring under this delusion, as distinctly as you see and hear." Many give an account of their visions, with a coolness that belongs only to the most entire conviction. Hence results the most singular language and actions; for hallucinations, like actual sensations, produce among the insane either pleasure or pain, love or hatred. Thus, one rejoices, laughs aloud, and finds himself the happiest of men. Soothed by so lively and distinct an impression of good fortune is he, that, incapable of indulging in any foreign thought, he sees no limit to his felicity, and believes that it can never end. Another grieves, laments, and is in a state of complete despair; overcome by

the frightful hallucinations that press upon him. It is the more profound, as he finds himself confined to a dreadful condition, which is overwhelming him, and from which there is no relief. He can see no compensation nor any limit to his sufferings. Lypemaniacs also, believe that nothing can change their lot, neither to deprive them of the prosperity which intoxicates them, nor to withdraw them from the trying condition in which they groan night and day. Many believe that they shall never die. We have at the Salpêtrière a woman who demands that she may be cut in pieces, because she knows not what will become of her when, every body being dead, she shall remain alone upon the earth.

But hallucinations have not always the character of a fixed idea, or of a prevailing passion. Sometimes they extend successively to the recollections of objects, which have made impressions upon the senses, and give to the delirium a character of versatility, which is remarked both in their sentiments and actions. This happens in certain forms of mania and febrile delirium. Thus, there are patients whose hallucinations from time to time are found to change their object.

Hallucinations are therefore neither false sensations, nor illusions of the senses; neither erroneous perceptions, nor errors resulting from organic sensibility, as is the case in hypochondria. We may confound hallucinations with illusions of the senses, or with the false perceptions of hypochondriacs. The latter believe in the presence of external objects, or in a lesion of the sentient extremities; whilst in hallucinations, not only are there no external objects really acting upon the senses, but sometimes the senses no longer perform their functions. I once had in charge an aged merchant, who, after a very active life, was seized with amaurosis at about forty-one years of age. Some years afterwards he became a maniac. He was very much agitated, and spoke in a loud voice with persons whom he believed he both saw and heard. He beheld the most singular objects, and his visions often threw him into a complete state of enchantment. There was at the Salpêtrière in 1816, a Jewess, thirty-three years of age. She was blind, and also a maniac. Nevertheless she saw the strangest sights. Her death took place suddenly. I found both the optic nerves atrophied from their decussation to their entrance into the globe of the eye. In this case certainly, the transmission of impressions was impossible. The same is true with deaf persons, who believe that they hear people speaking. We have at this moment at the Salpêtrière, two women perfectly deaf, who have no other delirium than that of hearing divers persons, with whom they are disputing both night and day. They often, indeed, become furious. This frequently happens during sleep, with this difference, that at this time the senses are shut, and are not impressed by external objects; whilst in delirium, the senses, although open to impressions, not being attentive, are, as it were, inaccessible to them, and even, in some sort, repulse them. But in both cases the effects are the same.

The seat of hallucinations not being at the extremities of sensitive organs, must be at the centre of sensibility. In fact, we cannot conceive of the existence of this symptom, but in supposing the brain to be acted upon by some cause. The brain may be set in action by a sudden and violent commotion, by a strong mental conflict, or by vehement passion. It is wrought upon also sympathetically, in consequence of the peculiar condition of certain organs more or less remote from it. This takes place in the sympathetic forms of insanity, in fevers, in the phlegmasiæ, or by the ingestion of certain poisons. Darwin says, that hallucinations proceed, probably, from the origin of the nerve of sensation, which is the most susceptible to attacks of inflammation.*

* Doctor Foville, in the excellent articles on insanity with which he has enriched the "*Dictionary of Practical Medicine and Surgery*," says "that he has discovered lesions of the nerves in hallucinations." Might not this be a simple coincidence?

The brain is called into action by a violent impression which excites it strongly. This excitement may cause either a state of ecstasy in this organ, which produces a fixedness of ideas, or a convulsive condition of the brain, which gives rise to incoherence of ideas, and determinations most varied and fugitive.

Hallucinations relate usually to the occupations, whether mental or physical, to which the person suffering from them has been accustomed, or else they ally themselves to the nature of the cause that has kindled up the excitement of the brain. A woman has read the history of sorceries, and is wholly engrossed with those religious duties in which she is to take part. She sees herself transported thither, and participating in all those rites by which her mind is fascinated. A lady reads in a journal an account of the condemnation of a criminal. She sees every where the bloody head separated from the body, and covered with black crape. This head projects over her left eye, and inspires her with such inexpressible horror as to cause her to make several attempts upon her life.

Hallucinations may result moreover, from the repetition, either voluntary or otherwise, of the same cerebral movements. These may be frequently repeated, in order to acquire a certain kind of information, or to examine some subject; many examples of which we find in the lives of contemplative men. Habit renders these movements easy, and even involuntary, as it does certain organic actions. The action of the brain prevails over those of the senses, destroys the effect of present impressions, and causes him who labors under hallucinations, to regard the effects of memory as actual sensations. From this time the moral state is perverted, and there is delirium. We notice among the hallucinated a sort of eccentricity, as we do among the most rational men, who are absorbed in some profound meditation.

The man whose delirium has for its object an exalted passion, no longer perceives any thing. He sees and hears, but these impressions do not reach the centre of sensibility. The mind does not react upon them. The man who is subjected to the influence of a controlling passion is altogether engrossed thereby; is drawn away by it; is beside himself. Whatever does not appertain to the series of ideas and affections which characterize his passion, is nothing to him; whilst every thing proper to it is ever present to his mind. Here is a passion which controls the reason, modifies the ideas, and provokes the determinations. And as, of all the passions love and religion are those which hold the most absolute empire over man, since they affect at the same time both his mind and heart, it is not astonishing that religious and erotic monomania should be signalized by hallucinations the most strange and frequent.

Hallucinations take place among men who have never had delirium, but they constitute one of the elements of delirium which are most frequently found in mania, lypemania, monomania, ecstasy, catalepsy, hysteria and febrile delirium. Among a hundred insane persons, eighty at least have hallucinations. Sometimes this symptom appears a long time before delirium becomes apparent to those who reside with the patients. They often struggle against their hallucinations before manifesting or complaining of them, and before committing any impropriety either of speech or act. Sometimes at the commencement of the disorder, the hallucinations are fugitive and confused. With the progress of it, they become as distinct and complete as the actual sensations, and are continued and permanent. They not unfrequently persist, though the delirium may have ceased. During the most general delirium, or a very animated conversation, the insane man suddenly checks himself, to contemplate an object which he believes strikes his eye, or to listen and reply to persons whom he thinks he hears. This symptom may be observed among almost all those who have delirium. Nevertheless individuals,

who, before their illness were controlled by a passion, or subject to strong conflicts of mind, are more exposed to it than others, especially if they have previously applied themselves to speculative and abstract studies. If hallucinations are most frequently the lot of feeble minds, men the most remarkable for their strength of understanding, the depth of their reason, and their vigor of thought, are not always free from this symptom.

At one time, the hallucinations seem to depend upon the functional lesion of a single sense,—the hallucinated believing only that they hear. At another, they seem to depend upon that of two and even three senses,—the patient believing that he hears, sees, or touches. Sometimes indeed, all the senses seem to concur in producing and continuing the delirium. Certain facts prove that hallucinations characterize only a particular state of delirium,—a circumstance which has caused some to regard the hallucinated as inspired; but on continued observation, these individuals immediately betray the true cause of their condition. In Germany, we find still among this class of the insane those whom they call seers. In the East, and in India, we meet with pretended prophets, who are only hallucinated.

Hallucinations depending upon impressions perceived by the senses of taste and smell, are reproduced, particularly at the commencement of insanity. But those which appertain to sight and hearing, are more frequent during all periods of the malady. Hallucinations of sight, reproducing objects which occasion the most general interest, and make the strongest impression upon the multitude, have been denominated *visions*. This name is suited to a single form of hallucination. Who would dare to say, visions of hearing, visions of taste, visions of smell? and yet, the images, *ideas* and *notions*, which seem to belong to the functional alteration of these three senses, present to the mind the same characters, have the same seat, that is to say, the brain, are produced by the same causes, and are manifest in the same maladies as hallucinations of sight,—as *visions*. A generic term is wanting. I have proposed the word *hallucination*, as having no determinate signification, and as adapted consequently, to all the varieties of delirium which suppose the presence of an object proper to excite one of the senses, although these objects may be beyond their reach. Hallucinations are an indication little favorable to a cure in the vesaniæ. As they are only a symptom of delirium, and may exist in many diseases of the mind, either acute or chronic, they do not require a particular treatment. They ought nevertheless, to have great weight in the intellectual and moral management of the insane, and the therapeutic views which the physician may propose.

ILLUSIONS OF THE INSANE.

Preliminary remarks.—Illusions, by some authors confounded with hallucinations.—Distinction pointed out.—Illusions not uncommon when in a state of health.—Examples.—Hypochondriacs suffer from them.—Three conditions necessary for the correct perception of a sensation.—Remarks on the causes of illusions.—Divided into ganglionic illusions and illusions of the senses.—I. Examples of the former class.—Post-mortem examinations.—II. Examples of the latter class.—Proof that illusions depend upon the anormal action of the extremities of nerves.—Cases.—Inflammation or other lesion of the nervous center or its membranes, often give rise indirectly, to illusions.—Conclusion.

The insane believe that they see, hear, feel, taste and touch, whilst the external objects, answering to these sensations respectively, are not within reach of their senses, and cannot actually impress them. This symptom is an intellectual and cerebral phenomenon, and the senses are not concerned in its production. It occurs, although the senses do not perform their functions, and even though they no longer exist. Thus, there are deaf persons who think they hear; and blind, who believe they see. The ancients had observed this symptom only in connection with recollections of the sensations of sight, and had given to it the appellation of *vision*. But the analysis of thought among the insane, (for the insane think and reason), proves that the same phenomenon takes place relative to sensations formerly perceived by the sense of smell, and those of taste and touch, as well as by that of sight; a circumstance that has led me to give to it the generic name of hallucination. In the essay on hallucinations, I particularly noticed this psychological phenomenon, and stated facts which demonstrated that hallucinations sometimes existed without delirium, and characterized one variety of monomania. The ancients did not distinguish *visions* from illusions of the senses. Some moderns adopting the term which I proposed as a substitute for visions, have confounded hallucinations with illusions; dividing them, indeed, into mental hallucinations (*visions*), and sensorial hallucinations (*illusions of the senses*). Their authors have not distinguished with sufficient clearness, the essential difference which exists between these two orders of phenomena. In hallucinations every thing goes on in the brain. Visionaries, and those in a state of ecstasy, are hallucinated. They are in a revery, though quite awake. The activity of the brain is so energetic, that the visionary or the hallucinated, gives a body and reality to the images and ideas that memory reproduces, without the intervention of the senses. In illusions, on the contrary, the sensibility of the nervous extremities is altered: it is exalted, enfeebled, or perverted. The senses are active,

and the actual impressions solicit the reaction of the brain. The effects of this reaction being submitted to the influence of the ideas and passions which control the reason of the insane, they deceive themselves in respect both to the nature and cause of their actual sensations.

Illusions are not rare in a state of health, but reason dissipates them. A square tower, seen from a distance, appears round; but if we approach it, the error is rectified. When we travel among mountains, we often take them for clouds. Attention immediately corrects this error. To one in a boat, the shore appears to move. Reflection immediately corrects this illusion. Hypochondriacs have illusions, which spring from internal sensations. These persons deceive themselves, and have an illusion respecting the intensity of their sufferings, and the danger of losing their life. But they never attribute their misfortunes to causes that are repugnant to reason. They always exercise sound reason, unless lypemania (*melancholy*) is complicated with hypochondria. Then delirium is present; and lypemaniacal hypochondriacs have illusions, and reason incorrectly respecting the nature, causes and symptoms of their malady. Illusions, so frequent among the insane, deceive them respecting the qualities, relations and causes of the impressions actually received, and cause them to form false judgments respecting their internal and external sensations. Reason does not rectify the error. Three conditions are necessary for the perception of a sensation. The integrity of the organ which receives the impression, the integrity of the nerve that transmits it, and the integrity of the instrument which reacts upon this impression. Illusions of the senses depend also upon three causes: alteration of the organs of sense, a lesion of the nerves of transmission, or an anormal condition of the brain. If the sensibility and activity of the senses are affected, it is evident that the impression made upon them by external objects is modified. If the nerves of transmission are disordered, and if at the same time the brain is in a pathological state, it cannot rectify the error of the senses: hence illusions. If the fugitive and brief attention of maniacs does not permit the senses to delay long enough upon external objects to make a distinct impression, the perception is incomplete, and the qualities and relations of objects which impress them will be imperfectly perceived. In monomania, on the contrary, the attention being too concentrated, cannot transfer itself successively to objects external and foreign to the intellectual or affective preoccupations, which control the patient. Hence illusions, which reason does not remove.

The passions, the source of so many illusions among men of sound minds, modifying also the impressions, and giving a wrong direction to the reaction of the brain, are the cause of a thousand illusions among the insane. The understanding and the passions concur with the senses in the illusions of the insane; and the sentient extremities are the true points of departure of the illusions. There is always an actual impression upon the senses of external objects. Let us now see what facts report. They inform us that illusions spring from internal and external sensations. I would distinguish them into ganglionic illusions, and illusions of the senses.

§ I. Perturbations of organic sensibility, internal sensations, often produce the illusions of the insane.

The skin of some insane persons is hot, dry, arid and cadaverous, and imperfectly performs its functions. These patients are indifferent to the extremes of temperature. Pinel speaks of a maniac who was accustomed to gather up handfuls of snow and rub it upon his chest with delight. Others experience such a degree of irritation of the skin, that they think they are to be smitten and murdered by the slightest contact. They also persuade themselves that we throw at them substances, or poisons which burn and greatly injure them. We have at Charenton an insane woman, who cries aloud the

moment we touch her with the end of the finger: "*You hurt me! Don't strike me, don't strike me,*" she cries.

An officer of ordnance, twenty-seven years of age, strong and tall, was taken with intermittent fever during the campaign in Prussia. He was required to drink a large tumbler of brandy, with which they had mingled the powder of two cartridges. M. *** immediately became a maniac. There was general delirium, loquacity, cries, rage. He destroyed every thing that came within his reach, linen, clothing and bedding. Force had been employed to cause him to sleep upon straw. Being pricked by it, he disposed the straw in a circle, leaving in the centre a void space, in which he placed himself. He turned his head in all directions, blowing incessantly upon the straw that surrounded him, and from time to time uttering cries, as if to repulse threatening objects. This symptom persisted both night and day for more than three weeks. It was known that the patient regarded each blade of straw as the beak of a bird of prey which was wounding him. He blew and uttered cries, to frighten and drive away these mischievous animals. At a later period, this same patient had new illusions. Scarcely had he retired at night than he destroyed his bed, and passed by handfuls the straw of which it was made, through the window of his chamber, which was closed by blinds, and spoke from time to time as if he was addressing horses. The sound of the footsteps of persons whom he heard walking, was taken by him for those of horses, who had come to his window as to a rack. The care that was taken to remove the straw so soon as he threw it out, kept up the illusion. He believed that the horses had eaten it. This patient often looked upon the clouds as a body of armed men, and supposed that this army was going into Germany when the clouds were blown towards the north, and were marching towards England when their direction was towards the west. Those pains in different regions of the body which the insane experience, are also the cause of illusions among them.

Mad'lle ——, eighteen years of age, enjoyed good health, although she was not regular with respect to the catamenia. She experienced at the close of the events of 1815, a fixed pain in the top of the head, and immediately persuaded herself that she had a worm in her head that was devouring the brain. The sight of copper caused a sensation of faintness, and her parents were obliged to have all the gildings of the apartment removed. She consented to walk only with the greatest reluctance, because the dust that was raised by those who were walking, was loaded with the oxyd of copper. Nothing could induce her to touch an article of copper, a gilded candlestick, or the cock of a fountain. Several months' treatment having proved of little benefit, I was called to visit her. She was emaciated, slightly pale, and very irritable. She sometimes refused to eat, slept poorly, and was constipated. She spoke of her peculiar repugnance to certain things, now with vivacity, now with anger, and now with tears. I endeavored to gain the confidence of my young patient, and at first humored her notions, assuring her that I would destroy the worm, the cause of her sufferings, if she had the courage to submit to a slightly painful operation. I had so well succeeded in persuading her, that after one of my visits, during which I had spoken to her of cures obtained by a means which I pointed out to her, she raised her head, and with a knife made an incision through the scalp. Scarcely does she see her blood flowing when she finds herself ill. I was immediately sent for, and repaired to the patient. She had recovered her consciousness, and was very desirous that the operation should be performed, about which I had been conversing with her for some time. Her courage sustains that of her parents, who consent to the employment of the means which I had proposed. M. Bigot, usually the physician of the family, makes a crucial incision of more than two inches in extent, over the painful point, and permits the blood to flow. We showed to

the patient a portion of the fibrine, which we assure her is the worm which has cost her so much suffering. An issue was established in the centre of the incision, and kept open for three months, after which the fixed pain, illusions, and her fears of *verdigris*, disappear.

Some years subsequently, while I was giving my clinical lectures on mental diseases at the Salpêtrière, a similar case presented itself in the person of a country woman, who had been admitted into the division for the insane. She complained of fixed and very acute pains at the top of the head, which she attributed to the presence of an animal; a circumstance that had thrown her into lypemania with a disposition to suicide. I made a crucial incision over the painful point. I was careful to show to the patient a fragment of an earth worm, assuring her that this was the cause of her sufferings. After the operation, this woman showed to her associates the animal from which she had been relieved, expressing her joy at being cured. But thirty-six hours afterwards, the companions of this unfortunate woman began to ridicule her, and to say that I was imposing upon her credulity. She tore away at once the issue that had been established, her former pains returned, and with them her illusions.

A general of division, fifty years of age and upward, had become rheumatic during the war, and was taken with mania accompanied by rage, in consequence of a moral affection. His teeth were poor, and he often suffered from them. He accused the sun of being the cause of the sufferings which he experienced, and when his pains were exceedingly severe, would utter frightful cries and imprecations against this luminary, and threaten to go and exterminate it with his brave division. Sometimes the pains were seated in one of his knees; the patient would then seize with one hand the painful part, and with the other closed, smite his knee with heavy blows, repeating: "*Ah! villain, thou shalt not escape! ah! villain!*" He thought he had a robber in this knee.

A lady thirty years of age, and of a strong constitution, having become hypochondriacal after severe grief which had occasioned loss of rest, persuaded herself that her brain was petrified. At a later period, having felt the beating of the temporal artery, when lying upon the right side, she concluded that her brain was liquified, and that it was running like a torrent. This illusion was the more remarkable, as she very well knew that such a condition of the brain was impossible.

Gastric and intestinal pains, borborygmi, and troubles respecting the alvine evacuations, are also symptoms upon which the insane often found an illusion, forming judgments as false as diverse, respecting the nature and causes of these symptoms. Facts on this point are very numerous, and are found in every author.

Ambrose Paré cured a hypochondriac who believed that he had frogs in his stomach, by administering a purgative which procured abundant stools, and taking the precaution to introduce secretly small frogs in the vessel which was to receive the rejected matters.

I opened the body of a lypemaniac at the Salpêtrière, who had believed for many years that there was an animal in her stomach. She had a cancer of this organ. There is in the division for the insane at the Salpêtrière, a woman who has for many years suffered from abdominal pains. She assures us that she has in her bowels a whole regiment. When the pains are exasperated she becomes excited, cries aloud, and affirms that she feels the blows which the soldiers give each other in their contests, and that they wound her with their arms.

A woman, about 58 years of age, of a strong constitution and sanguine temperament, had become a mother by M. R., at whose house she lived as door-tender. This was a source of deep mortification to her. She afterwards

experienced gastro-intestinal affections, and became a bigot. The events of the revolution, concurred, with the cessation of the catamenia, to produce an attack of mania. She was brought to the Salpêtrière where she passed many years. In stature she was small, her neck thick and short, her mind strong, and she was of a very full habit. There was something mysterious in the expression of her countenance, and she complained of pains at the epigastrium, which was sensitive to the touch. She had copious eructations, and was often affected with dysmenorrhœa. Habitually calm, she occupied herself in sewing. They called her in the hospital the *Mother of the Church*, because she was constantly talking on the subject of religion. She attributes her sufferings to the wickedness of Pontius Pilate, (the father of her child). This infamous wretch has taken up his abode in her bowels. She sees him there, and every time that she meets me, she beseeches me to expel him. She believes also, that she has in her belly all the personages named in the New Testament, and sometimes even those of the whole Bible. She often says to me; "*I can hold out no longer; when will the peace of the church come!*" If her pains are exasperated, she repeats to me with imperturbable coolness; "*To-day the crucifixion of Jesus Christ takes place; I hear the blows of the hammer with which the nails are driven.*" She believes that the popes hold their council in her bowels. Nothing can dissipate illusions so strange. At the post-mortem examination of this woman, who died March 6th, 1816, the body was in good case. I found at the middle and superior part of the occipital region, a depression, which would admit the extremity of the little finger, but did not extend to the internal table. The brain was slightly injected, and the ventricles contained a small quantity of serum. The ventricles of the heart were full of coagulated blood. The abdominal viscera adhered together, and to the abdominal parietes, by means of the peritoneal membrane, which was much thickened. It was impossible to separate the intestines from each other. So strong were the adhesions, that they formed a solid, inseparable mass. The liver was exceedingly voluminous, extending to the left hypochondrium, where it adhered to the spleen.

I found the same alteration, although the adhesions were less strong and general, in the case of a demonomaniac, who believed that she had several devils in her belly, who were rending her vitals, and constantly tempting her to destroy herself. This woman was in a state of extreme emaciation, her skin had become embrowned as if tanned, and deprived of all sensibility. I sometimes pierced it with large pins without producing the least pain. Seeing herself so insensible, this lypemaniac became persuaded that her skin was changed into that of the devil. Irritations, pains, and lesions of the organs of generation, are, among the insane, and particularly with women, the frequent cause of illusions. They have sometimes induced the insane to mutilate themselves. Erotic female monomaniacs, experience all the phenomena of a union of the sexes. They think themselves in the arms of a lover or ravisher. An hysterical female monomaniac believed that the devil, serpents and animals, introduced themselves into her body, by the external organs of reproduction. Cancers, and ulcers of the uterus, are not uncommon among this class of patients. The hysterical insane are disposed to attribute, and do sometimes attribute, to enemies, to the jealous, and to the devil, the pains and constrictions of the throat which suffocate them. The flying pains which they experience in the limbs, give rise to the most painful illusions.

We have at Charenton a monomaniac, thirty years of age, who is persuaded that he is conducted every night into the vaults of the opera. There, and even sometimes without leaving his chamber, they pierce him with knives, plunge poniards into his back and breast, and take off now an arm, now a thigh. They even cut off his head. When it is remarked to this unfortunate man that his head is upon his shoulders, that he preserves his members, and

that his body presents no wound nor cicatrix, he replies with animation: "*These are the wretches, the magnetizers and freemasons, who have the secret of readjusting the limbs, so that no evidence of their amputations shall appear.*" If we insist; "*You have an understanding,* he replies, *with these monsters and brigands.*" "*Slay me, slay me! I cannot resist the sufferings which they cause me to endure, nor their cruelty.*" The father of this monomaniac, and his former partner, are especially accused by him as the chiefs of all the villians who nightly torture him.

§ II. After a recital of facts which indicate the part which the internal sensations perform, in illusions, let us pass to those which take their origin in the external senses. The perturbations of animal sensibility, and the impressions which come from without,—external sensations are, we remarked in commencing, the causes of numerous illusions. Illusions of the external senses are not rare with man in a state of health, and are frequent among the insane. Reason immediately rectifies the errors of the former, while there is none to combat the illusions of the latter. Does the maniac hear a sound, he believes that some one is speaking to him, and replies accordingly. Does he hear several persons speak? He believes that they are friends who are hastening to deliver him, or subjects who have come to raise him upon a broad shield, and proclaim him king. He who suffers from panophobia, believes on the contrary that they address him with reproaches and threats. An unmeaning phrase he construes into the expression of a concerted plot against him. He thinks he hears enemies, agents of police and murderers, making arrangements to arrest and conduct him to prison, or the scaffold. Does a door open? he believes himself lost, and ready to become the prey of those who desire his destruction.

A servant, thirty-one years of age, had lost his employment, by which he supported his family, and had come to want. He starts for Paris. Suddenly he jumps from the carriage, and insults his traveling companions, who have, he says, made remarks disreputable to him, and treated lightly his destitution. All of them were, indeed, unknown to him. Having arrived at Paris, he took lodgings in the street Bourgogne, but dared not go out of the house, seeing in every one he met, spies and agents of police, ready to arrest him. This young man was, moreover, very calm and rational on every other subject. One day he hears the footsteps of several persons who are ascending the stairway of the house in which he resided. Convinced that they have come to arrest him, he seizes one of his razors and makes with it several superficial wounds in his neck. His sister, who was in the chamber, threw herself upon him, when he laid aside the razor, but endeavored to throw himself from the window, dragging her with him. The neighbors hastened to them, and placed the sick man in bed. He had concealed a pen-knife, with which he inflicted several wounds upon the chest, but without penetrating the cavity. One hour after, having had his wounds dressed and been bled, he confessed to me that he had sought to take his life, only to secure himself from arrest and the infamy of the scaffold, for which they came to take him.

I once had in charge a lady, whom the slightest noise filled with terror, especially during the obscurity of the night. The steps of a person walking lightly, made her shudder, and the wind caused her to tremble. The noise which she herself made while in bed, frightened her, and obliged her to rise, and utter cries of terror. I enabled this panophobist to rest at night, by keeping a light in her chamber, and placing a woman with her, who watched during the whole night. Sight is the sense which provokes the most illusions in a state of health, because it is, more frequently than the others, in relation with external objects. Illusions of sight also, are very frequent among the insane. They call up resemblances which provoke indignation, fear, remorse and fury, and almost always augment delirium. Thus one sees in a relative

or friend, an unknown person, or an enemy, against whom he has formerly had cause of complaint.

A lady, twenty-three years of age, affected with hysterical mania, was accustomed to remain constantly at the windows of her apartment. It was during the summer. Whenever she saw a beautiful cloud, isolated in the air, she would call with a loud voice, "*Garnerin, Garnerin, come and seek me,*" and repeat the same invitation until the cloud had disappeared. She regarded the clouds as the balloons sent up by Garnerin.

An officer of cavalry, on seeing clouds, regarded them as a body of armed men, whom Bonaparte was conducting to the invasion of England. The insane often collect stones and fragments of glass, which they look upon as precious stones, diamonds, antiques, and specimens in natural history, which they preserve with the greatest care. We have at Charenton an aged professor, who preserves in his chimney an enormous quantity of small stones, to which he attaches great value. He distributes them as rewards of great price, and is grieved and angry when they are taken from him. He believes that they are characters for printing, of which he is unwilling to be deprived. Another patient collects stones, snails, broken pieces of glass, and pottery, to make of them, he says, a rich collection in natural history. He accuses of ignorance, those who do not concur with him in opinion respecting the beauty and rareness of his specimens.

Mad'e de C., having reached the critical period of life, was taken with hysterical monomania. After some years her delirium changed its character. She composed verses, and wrote comedies, which she wished to submit to the judgment of the academicians; causing them to be read to all those whom she met, and applauding herself the beauties which her compositions presented. During the last six years of her life she no longer wrote, but collected pebbles, filling the drawers of her furniture with them. From time to time she entrusted one, or several, with me; boasted of their size and price, and advised me to cause them to be sent to the king, in order to reëstablish the finances of the state. The effects of light, reflected upon the walls of the apartment occupied by the insane, or modified by articles of furniture, are frequent occasions of illusion.

A gentleman attacked with hypochondriacal lypemania, was in the habit of striking continually with his cane upon the furniture of his apartment, and even of the saloon where several persons were assembled. The more rapidly he walked the more he struck. I discovered at length that the shadow, projected upon the inlaid floor by the furniture, was mistaken by him for rats. The shadow of the patient passing between the furniture and the light, caused him to think that the rats were very numerous, and he then struck to frighten them. The more speedily he moved, the more rapid were the flickerings of the light, and the more firmly did the patient believe that the number of rats had increased.

I had in charge at one period a young lady who was occupied much in art and literature. Her imagination was very active. She was a maniac, and passed the night without sleep, ravished with the beautiful pictures which she saw designed upon the curtains of her bed and windows. She expressed aloud her rapturous delight. I enabled her to rest, by depriving her of light during the night.

A young lady, laboring under a second attack of mania, very often refused the food with which she was served. On enquiring the reason, she replied that it sometimes bristled with pins and needles.

The insane are often unable either to read or write; nor can we always attribute it to weakness of the brain, or feebleness of the reason. In some instances it happens that when the patient attempts to read or write, the letters mingle together confusedly, or rather move about; as if they were springing from the paper. It is this circumstance evidently, that prevents them from

either reading or writing. But are these illusions the result of the anormal action of the eyes, an action which the cerebral reaction does not rectify? The two following facts furnish a sufficient reply to this question. Reil relates that an insane lady had attacks of excitement and even fury. Her waiting woman, wishing on one occasion to restrain her mistress, placed her hands over her eyes. The patient immediately came to herself, and was perfectly calm, saying that she no longer saw any thing. The physician, instructed by this phenomenon, tested it himself, and was convinced that the agitation of this patient was produced by disorder of sight, which represented frightful objects to her vision.

I once had charge of a young soldier, allied to the family of Bonaparte. After many errors of regimen and reverses of fortune, he became a maniac and was committed to my care. He saw in every one around him a member of the imperial family. He was excited and indeed enraged, when he saw the domestics fulfilling any servile duty. He prostrated himself at the feet of one of them whom he took for the emperor, and demanded favor and protection. It occurred to me one day to bandage his eyes with a handkerchief. From that moment the patient was calm and tranquil, and spoke rationally of his illusions. I repeated the same experiment several times, and with the same success. On one occasion among others, I kept the bandage for twelve hours over his eyes, nor did he speak irrationally during the whole period. So soon however as he could see, the delirium commenced again.

The sense of smell, like the other senses, deceives the insane. This class of patients are very suspicious, and refuse their food, because they find it of a disagreeable odor. They in general smell of both the food and drink which are offered them, before tasting, and sometimes dash them away with fury, believing that they discover the presence of poison. Many insane persons, on smelling the gases diffused in the air, regard them as unwholesome, and suited to poison them. One of our patients who suffers at times from dyspnœa, often remarks to me: "*I know not what there is in the air, but I cannot breathe. It contains a mephitical quality, which takes away my respiration. I am dreadfully emaciated, and shall die on account of this condition of the atmosphere.*"

I have seen the insane, when very much agitated and restless, composed by agreeable odors diffused around their apartments. Almost always at the commencement, and sometimes in the course of mental disorders, the digestive functions are primitively or secondarily affected, and the insane find an unpleasant taste in all the food which is presented them; whence they conclude that their aliment is poisoned, and reject it with fury or with dread. This phenomenon provokes moreover, among these patients, an aversion to those who have the care of them; and this is the more violent, in proportion as those persons were more dear and devoted to them. Is there any thing more dreadful than the fear of being poisoned by those we love? This dread and refusal of food ceases after a few days, either by change of diet or after evacuations, by which the gastric embarrassment or irritation of the stomach is dissipated. This symptom, so trying to those who are not in the habit of observing the insane, is not one of serious import. It is not alarming like the obstinate refusal of some monomaniacs, who do not eat, either in obedience to a fixed idea which controls them,—such as an expiation, the fear of failing to fulfill a religious precept, or in consequence of some principle of honor, or to terminate their existence. It happens also, that the dryness and aridity of the mucous membrane of the tongue and mouth, persuade some insane persons, that earth has been mingled with their aliments, and that it is desired that they should eat of tainted food; whilst in other cases, particularly in dementia, the sense of taste being destroyed, the patients eat the most disgusting and fœtid substances.

The sense of touch, so often appealed to by the reason, to dissipate the

errors of the other senses, sometimes deceives the insane. I have already cited several facts, which demonstrate that the perversion of the sensibility of the skin causes numerous illusions respecting the qualities of bodies surrounding or placed in contact with the cutaneous surface. When inflammation, or some other lesion takes place in the meninges of the brain, or in the organ itself, then the members become sometimes tremulous, and the extremities of the fingers lose their natural sensibility. The attention no longer directs the application of the organs of touch, and the memory is unfaithful. Hence spring illusions from the tactile impressions of bodies. These patients are awkward, grasp feebly, and do not retain what they lay hold of. They break, or permit to fall, the objects they have taken up. They judge incorrectly of the form, extent, solidity and weight of bodies; the pathological condition of the brain not permitting them to rectify these illusions.

A lady very much enfeebled by her confinement, and by sanguine evacuations, performed in order to combat an attack of mania, suffered from obstinate constipation. I prescribed enemata; and notwithstanding her agitation, she wished to administer them herself. Scarcely had they put the syringe into her hands, than she threw it aside with horror. The same thing is repeated several times. This lady has since assured me, that the syringe appeared to her so heavy, that she thought it was filled with mercury, and persuaded herself, that we wished to make a barometer of her body.

Conclusion.—From what precedes, I think we may conclude:

1. That illusions are produced by external and internal sensations.
2. That illusions are the result of the action of the sentient extremities, and the reaction of the nervous centre.
3. That illusions are as often provoked by excitement of the internal, as by that of the external senses.
4. That illusions should not be confounded with hallucinations, (visions), since in the latter the brain alone is excited.
5. That illusions mislead the judgment respecting the nature and cause of the impressions actually received, and impel the insane to the commission of acts, dangerous to themselves and to others.
6. That the sex, education, profession and habits, by modifying the cerebral reaction, modify the character of the illusions.
7. That the illusions take the character of the passions and ideas which control the insane.
8. That reason dissipates the illusions of a man sound in mind, whilst it is impotent in destroying the illusions of the insane.

This essay will not be without interest, if, by observation, I have proved the existence of a psychological phenomenon imperfectly understood, although frequent in delirium; if the facts which I have related, throw some light upon the history, still obscure, of the aberrations of the understanding; and if these facts furnish therapeutic views, applicable to the treatment of mental diseases.

[The general principles of treatment both in Illusions and Hallucinations, are the same. Active remedies are rarely necessary. Abundant exercise in the open air, a nutritious diet easy of digestion, the warm bath, and counter irritation in many cases, together with cheerful, and if possible engrossing occupations, will meet most successfully the indications of treatment. Great tact and ingenuity, as well as promptitude in decision and action, are often necessary in the management of those suffering from this form of insanity, nor can detailed directions be given, which, in all respects will be adapted to the circumstances of any two cases. Still the leading principles of treatment being fully understood, a discerning mind will find little difficulty in their application.]

FURY.

Definition.—Causes hemorrhages, convulsions, apoplexy and death.—Aspect of countenance in a state of fury.—Confounded with mania by the ancients.—Rage, definition of.—Fury appears in all forms of mental alienation, and even dementia.—Sanguine and bilious-nervous temperaments predispose to fury.—By what caused.—Not in general automatic.—Usually intermittent.—Fury sometimes terminates in dementia, and sometimes is the last link in the chain of circumstances that affect its cure.—Fury renders the prognosis in mental alienation more favorable than its opposite.—It may be so intense as to create danger.—Treatment, with important remarks.

Fury is a violent excitement, caused by an error of mind or heart. We call that man furious, who, transported by delirium, or some passion, exhausts himself by talk, by threats and actions; seeking at the same time to injure others and himself.

Fury expresses the highest degree of exaltation of the vehement passions. We love or hate with fury. We denominate fury, a violent attack of anger. Religious fanaticism as well as political excitement and enthusiasm, are sometimes converted into uncomplicated fury. This extreme state of the passions, which deprives a man of reason, and conducts him to the most fearful resolutions, leads, often enough, to mental alienation. It causes hemorrhages, convulsions, apoplexy and death. In fury the face is flushed, or very pale, and always spasmodically affected; the eye flashes, the expression of the countenance is ferocious, the voice loud and hesitating, the tone threatening, and the whole body convulsively agitated. Fury is in most cases expansive, though sometimes, sullen and concentrated. It is always succeeded by lassitude, and extreme prostration of the vital forces.

Fury is an accident, a symptom;—it is the anger of delirium. It was confounded with mania by the ancients, and by many moderns, just as hydrophobia was confounded with rage, which is an extreme degree of fury. Mania consists in a general chronic delirium, without fever, with exaltation of the sensibility and motive powers, in opposition to dementia, which is a general chronic delirium with diminution of power. But all maniacs are not furious; nor are all those suffering from hydrophobia *enraged.* Fury however, appears in all forms of delirium, even in febrile delirium. It appears in all forms of mental alienation, and even in dementia. It bursts forth also in many diseases, which we cannot confound with mania, such as meningitis, hysteria and hydrophobia. It appears in drunkenness, after the use of certain poisons, etc. Fury is therefore, a symptom, very distinct from mania. It may well appertain to a variety of mania, but not furnish it with a specific character; since we

observe it in many varieties of monomania, lypemania, dementia and idiocy. The sanguine, and particularly the bilious-nervous temperament, both being exceedingly irritable, predispose to fury. The scorching heat of the air, certain atmospheric constitutions, and certain winds, render more imminent the explosions of fury, as well as all those circumstances that augment the impulse of blood towards the head, or excite the cerebral nervous system.

Fury is caused by the use, or rather the abuse of various substances introduced into the stomach. Wine, alcoholic liquors, opium, etc., produce fury. The same is true of meningitis, hydrophobia and hysteria. In all these cases, the hallucinations, illusions of the senses, and the perversion of the moral affections which overthrow the reason, render the patient furious. If maniacs are more frequently furious than other insane persons, it must be attributed to their temperament, their extreme susceptibility, and the exaltation of all their faculties; circumstances which render them exceedingly impressible, and consequently, very irritable and choleric. Man in a state of dementia is rarely furious, because innervation, in his case, is without energy, sensibility almost extinct, and impressions almost null. Fury is no more automatic than are all the other determinations of delirium, inasmuch as the furious do not give themselves up, without motive, to their transports of excitement. It is to shun some danger with which they believe themselves menaced, to resist obstacles real or imaginary, or in fine, to take vengeance upon those whom they regard as their enemies, that the insane become furious. I shall have to notice, however, some exceptions, in speaking of homicidal monomania.*

Fury is rarely continued. It is intermittent, like the action of the causes that produce it. If continued, it cannot be of long duration. It is always a distressing symptom in fever, or in the phlegmasiæ. It is not thus in mental alienation, and is critical in consecutive dementia. When, after a too debilitating treatment, the insane have fallen into dementia, if they recover their vital forces, mania and even fury, put an end to the delirium. This was observed by Pinel, among the insane, who, after having been submitted to treatment at the Hôtel Dieu, were sent to the Bicêtre in profound dementia. We also see fury terminate in incurable dementia, and sometimes a single day suffices to produce this result. The fury which occasions so much terror and disquietude, among those who are not accustomed to the insane, far from rendering the prognosis in mental alienation less favorable, furnishes stronger hope of cure. Furious maniacs and monomaniacs, are cured more frequently than the insane who are composed and mild. With the latter, there is less vital force, less energy, less reaction, and cures are more difficult. It is not unusual, that after an attack of fury, the insane become more calm and rational. But if the fury is continued, if the delirium is general, and so intense that it takes from the furious person the sentiment of his own existence, we may fear that the patient will not resist the excess of excitement, and that death will promptly supervene. If the insane in their fury, commit acts of atrocity, it is to be feared that they will not recover. (I have never seen an insane person cured who had taken the life of his children, relatives or friends.) They are not incurable however, when they have compromised only their own existence.

[A female aged 24 years, was placed at the Retreat for the Insane at Hartford, Conn., during the autumn of 1840, who had just taken the life of one of her children, and made an attempt upon that of another. She was small, slender, and quite delicate. Her features were small—their expression vacant, yet tinged with melancholy. She refused to speak, and disregarded any request that was made. Such was her condition for several weeks. At the expiration of this period, I was informed one morning by her nurse, that

* See note on Homicidal Monomania.

a change had taken place in Mrs. ——. On repairing to her apartment, I found her bathed in tears. The expression of her countenance was changed, and she seemed to have awoke to the realities of her condition. She replied in monosyllables to such questions as were put to her, but with manifest reluctance.

Suffice it to say, that after a long and tedious convalescence, during which she suffered greatly from palpitations of the heart and other nervous symptoms, *she recovered perfectly*, and has continued well until the present time. This case may be found reported at some length in the Eighteenth Annual Report of the Retreat, Hartford.]

Fury, being one of the most alarming symptoms of insanity, ought to attract particular attention, though it does not require special treatment. Its treatment should be merged in that of the maladies of which it is a symptom; nevertheless, it requires special hygienic attentions. It is because fury has been taken for insanity itself, and great therapeutic importance has been attached to this symptom, that so many grave errors have been committed in the treatment of the furiously insane. They were bled to excess, with the intention of abating their vital force, and it was not perceived that the loss of blood augmented the evil, and that it composed the sick only by depriving them of the power of reaction, necessary for the solution of the disorder.

This symptom has been the cause of the most general, as well as fatal errors in the treatment of the insane. Seeing among them only the furious, all the insane have been treated like dangerous and mischievous animals, ready to destroy and exterminate every thing; against whom it was necessary to protect society. Hence dungeons, cells, grates, chains and blows; means which, by exasperating the delirium, were a principal obstacle to its cure. Ever since these unfortunate people have been treated with kindness, the number of the furious has diminished to such a degree that, in hospitals well kept, and properly arranged, among many hundred insane people, not one can be found in a state of fury.

MENTAL ALIENATION

OF THOSE RECENTLY CONFINED, AND OF NURSING WOMEN.

Preliminary remarks.—Subject divided into two parts.—*Part First.*—Temporary delirium of early confinement briefly noticed.—Nearly one twelfth of the women at the Salpêtrière became insane after confinement.—More among the wealthy insane after confinement; among the poor after weaning.—History of this form of insanity.—Period of the first appearance of insanity in 92 cases, succeeded by several important deductions.—Symptoms accompanying an attack.—Form of insanity affecting 92 cases.—Age during which women are most subject to this malady.—Illustrative cases.—Is the suppression of the milk the cause or effect of insanity? Does the milk act as a foreign body in those accidents which follow confinement or lactation? Opinions of both ancients and moderns on these questions.—This class of cases generally cured, unless the predisposition is too energetic.—How produced.—Duration of attacks.—Relapses.—Mortality.—Remarks on post-mortem examinations.—General treatment.—*Part Second.*—Cases, with treatment in detail; together with an account of certain post-mortem examinations.

Although much has been written respecting the diseases to which those recently confined are exposed, and the ravages which the milk commits in the economy, when diverted from its secretory organs; accoucheurs and physicians, who have treated of the diseases of women, have little to say respecting those forms of mental alienation which burst forth after confinement, and during or after lactation. It is this circumstance which has determined me in making choice of this subject; with the hope of spreading abroad some light in a department of practice, of the more importance, as it interests a great portion of the female sex.

This essay is divided into two parts: the one is limited to considerations deduced from my private practice, and the division of the insane at the Salpêtrière: the other embraces observations or cases, which serve as a basis to the general considerations expressed in the first part. I had at first, distributed the observations in the first part, but it appeared to me, that they diverted the attention too much, and interrupted the chain of general ideas, which I have endeavored to render as brief as possible.

PART FIRST.

I will not speak of the transient delirium which takes place after confinement, and sometimes during the *milk fever*. This delirium is speedily dissi-

pated, either by the occurrence of the lochial discharge, or by its diminution when too abundant; by the lacteal secretion, the cessation of the fever, or the return of strength. Mauriceau and other accoucheurs have witnessed delirium on the second day of confinement, and seen it disappear on the fourth. Neither will I speak of the delirium of those who, in their phrensy, destroy the children to whom they have just given birth. False shame, perplexity, fear, misery and crime, do not always lead to infanticide. Delirium however, by disturbing the reason of the recently confined, sometimes also, directs their sacrilegious hands. A maiden becomes pregnant, does not conceal the fact, and causes the linen proper for her confinement to be prepared, and announces the expected event to all. She is confined during the night. On the following day, she is found in her bed and the child in the privy; mutilated by twenty-one wounds with an instrument, which is supposed to be a pair of scissors. She is arrested some hours after, and carried upon a litter, a distance of two leagues from the house where she was confined. She endeavors to conceal herself from the gaze of her indignant country women. While on the way, rising with difficulty, she frequently says to those who bear and conduct her: "*They will do me no harm; they will do nothing to me; will they? I have done no injury; they can do nothing to me.*" Some days after she is interrogated, and avows her crime; does not defend herself, manifests not the least regret, but refuses to eat. Has not this young woman suffered from an attack of delirium? Finally, this and other facts of similar import, belong to legal medicine, and ought not to occupy me here.

The number of women who become insane after confinement, and during or after lactation, is much more considerable than is commonly supposed. In fact, at the Salpêtrière, almost one twelfth of the women received, have become insane under these circumstances. There are years in which this proportion is one tenth; thus, of eleven hundred and nineteen women admitted into the division of the insane, during the years 1811, 1812, 1813, and 1814, ninety-two became insane after confinement, during, or immediately after lactation; and of these ninety-two women, sixty belonged to the years 1812 and 1813, during which there were six hundred admissions. And if of the whole number of insane women received during these four years, we deduct at least one third, who have passed the age of fifty years, beyond which period, women are not exposed to the influences of confinement and lactation, we shall be led to conclude, that mental alienation as a result of confinements, during, and after lactation, is more frequent than I at first intimated. This is true, particularly among the wealthy. The number in this class, according to the result of my private practice is almost one seventh. Astruc also, had observed that deposits, and engorgements of milk, are more frequent among the higher than the lower classes of society. But it is certain also, that mental alienation after weaning, is rare among the rich, whilst it is frequent among the poor, who either from necessity or voluntarily wean their children.

The precautions which the wealthy do, and are able to take, after weaning, account for this difference. Nothing can, however, relieve them of their extreme susceptibility, immediately after confinement, or whilst nursing. The epoch of the invasion of the malady, with reference to the time of delivery and lactation, it is not a matter of indifference to determine, since it furnishes indications useful in practice. Hippocrates, in the third book of *Epidemics*, relates several cases of grave affections, attended with delirium, supervening upon confinement, during the epidemic of which he gives the description. They are, for the most part, fevers. Perhaps case fourteenth, is one of acute mania. It is that of the wife of Epicrates, who, having been confined with twins, was delirious from the first day of confinement, and died phrenetic on the twenty-first. Levret informs us, that insanity is to be feared after confinement, if the lochia are scanty, or are suppressed; especially if the breasts do

not fill, or fall away. Zimmermann,* mentions some examples of mania and melancholy, preceded by suppression of the lochia. He cites, among others, that of a woman, who was cured, only at the expiration of six months. There was published at Gottengen in 1745, a thesis, sustained by Doct. Berger, bearing the following title: *De puerperarum Maniâ et Melancoliâ.* I have never been able to procure it. Doublet† says, that the *lacteal irritation, sometimes falls upon the brain,* either immediately after confinement, or at the period of the lacteal revolution. Some who have been confined, adds this author, have a fixed pain in the head; others are in a stupor, have a dull expression, and reason falsely. Of our ninety-two women, sixteen became insane, from the first, to the fourth day of confinement. We read in Puzos,‡ that lacteal deposits are sometimes made in the brain, and that they produce insanity by *compressing this viscus, or rather, by distending its fibres.* These deposits, according to this author, take place like others, from the tenth, to the twelfth day after confinement. He reports three cases on this subject. Among our ninety-two women, twenty-one became insane from the fifth, to the fifteenth day after confinement. Seventeen became insane between the fifteenth and sixtieth day after confinement, the extreme limit of the lochial discharge. Nineteen women lost their reason, between the second month or the following one, and the twelfth, during lactation. Nineteen were seized with mental alienation, immediately after a forced or voluntary weaning. We may therefore conclude: 1, that alienation of mind, is not more frequent among the recently confined, than among nursing women: 2, that the danger of losing the reason, diminishes, in proportion as the female is removed from the epoch of confinement: 3, that nursing women, especially poor ones, are much more liable to become insane after weaning, than during the period of lactation.

Mental alienation after confinement, is sometimes announced by sinister presentiments, even during pregnancy. Sadness and disquietudes, exaggerated or without foundation, are a prelude also, to the explosion of delirium. Sometimes the irruption of insanity takes place suddenly. At first, this class of insane persons appear to be in a febrile state. The skin is warm, pliant and moist. It is also pale, the tongue white, the breasts flaccid; and the abdomen neither tender nor painful. Sometimes, there is a very acute pain in the head or uterus, the pulse is small, feeble and concentrated, and at the same time, there is uncomplicated delirium or monomania, more frequently, mania, rarely dementia. Sometimes also, the most profound stupor presages phrensy, with which it is easy to confound mania. But the pain in the head, the redness of the eyes, the dryness of the skin, ringing in the ears, the anomalies of the pulse, *subsultus tendinum,* ataxy of the symptoms, and their rapid increase, furnish distinguishing evidence of the latter malady. Phrensy terminates fatally on the third or fourth day, rarely passing the seventh; whilst the duration of mania after confinement, is prolonged, and persists for several weeks or months, and sometimes even more. Mental alienation which makes its appearance during, or after lactation, presents little difference, as it respects its character and progress, from insanity which breaks forth under any other circumstances. Notwithstanding, there is something peculiar in its aspect, which causes it to be recognized by one who is accustomed to the care of the insane.

In comparing the different forms of mental alienation of the nine-two women who constitute the subject of this essay, I find the numbers following:

Dementia	8
Lypemania (melancholy) and monomania	35
Mania	49

* Treatise on Experience.
† Memoirs of the Royal Society of Medicine, ann. 1786, t. viii. p. 179.
‡ Memoir on Lacteal Deposits.

It may perhaps be asked, if the recently confined and nurses never sink into idiocy? By no means; since idiocy is a cerebral alteration, appertaining to earliest infancy.

Before passing to the causes which produce insanity among the newly confined and nurses, I ought to determine the age, during which they are most subject to this malady. Of our ninety-two women:

22	are	from	20	to	25	years	of age.
41	"		25	"	30	"	"
16	"		30	"	35	"	"
11	"		35	"	40	"	"
2	"				43	"	"

The age at which nursing women, as well as those recently confined, are most subject to mental alienation, is from 25 to 30 years. It is also the age of the greatest fruitfulness. The causes which especially predispose the recently confined and nurses to this malady are, hereditary predisposition, an extreme susceptibility, attacks of insanity anterior to pregnancy, and attacks consequent upon preceding confinements, or during lactation. In some cases, the predisposing causes suffice, not only to produce a transient delirium, but also to excite an actual attack of insanity. Such are the severe labor of confinement; and the return, simply, of confinement or lactation; the same physical circumstances bringing back the same functional alterations of the brain, together with the same intellectual, and moral disorders. It is singular, that women have been known to become insane after giving birth to a male child, while they were exempt from this accident after confinement with a daughter. We have seen women, whose delirium manifested itself only after every second confinement; also those who fell into the same condition, on the third or fifth month of each period of lactation, without any assignable exciting cause. The exciting causes which provoke insanity among the recently confined and nurses, are errors in regimen and the moral affections. Coolness; the impression of cold, in whatever way it may be made, is of all errors, most to be dreaded.

Exposure to cool air, or the application of cold water, by suppressing the lochia, provoke insanity;—and this, whether the person in child-bed, exposes herself to currents of cold air, or walks abroad; whether she, or her who nurses, plunges her limbs in cold water, cuts the hair, or employs in excess, heating remedies. Among our ninety-two insane women, fourteen times was mental alienation provoked by physical causes, and among these fourteen cases in ten instances, the impression of cold was the cause of the malady. Hasty weaning, whether voluntary or forced, becomes the cause of insanity, when nursing women, at this period, neglect those precautions which prudence and experience enjoin. We have already seen also, that nineteen, out of ninety-two women, became insane a few days or immediately after weaning, in consequence of imprudences or negligence. We have already remarked that insanity after weaning, is rare among the higher classes, because the women belonging to this class are extremely cautious at this period.

Moral affections are the most frequent cause of mental alienation among those recently confined, and nursing women. They are to physical influences, in respect to frequency, as one to four. The fatal, as well as general influence of these causes, has been understood in all times. At Rome, a crown was suspended over the entrance of the house of those recently confined, to give notice, that it was a sacred asylum. There exists at Harlem a law, which requires that a sign be placed upon the house of lying-in women. This sign serves as a safe-guard against the intrusion of bailiffs, and agents of police, who might otherwise present themselves in virtue of their office. Van-

Swieten assures us, that women in confinement, are often afflicted with incurable mania, in consequence of some corroding grief. What happens in consequence of confinements occurs also, during and after lactation, but is attended with much less danger. Of our ninety-two women, forty-six became insane, after suffering from some moral affection. The fear of again falling sick, after having had an attack of insanity, the despair caused by the loss of a child, or the abandonment of the father, anger, fright, mortification, and domestic dissensions, are also exciting causes.

The effects of fright were remarkable during the year 1814, since, of thirteen women who had become insane after confinement, in consequence of moral affections, and who were admitted into our hospital during that year, (1814), eleven became insane in consequence of fright. I made the same observation in eighteen hundred and fifteen. The predisposing prepare the recently confined, and those who are nursing, in some sort, for the action of exciting causes. Both the one and the other act with the more energy, in proportion as confinement and lactation, exalt the susceptibility and mobility of lying-in and nursing women, and render them more accessible to accidental influences. These latter, and among them, especially moral affections, are the more fatal, in proportion to the promptness with which they act.

A lady is happily confined, and on the following day perfumes her bed with odoriferous fluids. The lochia are suppressed, and the milk is not secreted. Mania bursts forth on the same day, and she is cured only at the expiration of ten months, after a catarrhal fever. A husband throws a bucket of water upon his wife, who was confined the night before. The unfortunate woman immediately becomes a maniac, and never recovers. A young woman eighteen years of age, evades the watchfulness of her parents, dissembles her pregnancy, is confined in a garret, at a very cold season, and passes down the stairs in order to regain her chamber. The lochia are suppressed, and an irruption of mania takes place, from which she recovers at the end of a year, when the menses are reëstablished. A woman, while nursing, is overtaken by a storm. She had become warm by walking rapidly, and passes through a stream, the water of which reaches her knees. The milk ceases to flow, and she becomes a lypemaniac. Another is frightened by a thunder-clap. The milk is suppressed, and she loses her reason.

When physical or moral causes, isolated or united, exert their action upon the recently confined, the lochia are diminished or disappear,—the milk no longer comes to the breasts, or they become flaccid, and mental alienation breaks forth. Things do not always proceed thus. It happens that insanity manifests itself, although there be no suppression; though the lochia flow imperfectly and scantily. There are cases, though they must be admitted to be very rare, in which the lochial discharge is natural, and partakes even of a hemorrhagic character, (case first), and nevertheless, the reason of the patient wanders. The same is true of the milk. Now it is wholly suppressed; and now there is not suppression, but the secretion is less abundant. It does not possess its nutritive qualities, and the child refuses the breast. Moreover, mental alienation occurs, although no suppression nor diminution may have taken place, and lactation continues, suited to the wants of the child. Here are very naturally presented, two interesting questions, which for a long time furnished matter for debate.

1. Is the suppression or diminution of the milk, the cause or effect of mental alienation?

We may reply, that insanity manifests itself most frequently, among women who do not nurse. Of our ninety-two insane women, twenty-nine were single, and sixty-three married. Now single women rarely nurse. The greatest number of facts, prove, that the milk diminishes, is suppressed, or loses its distinctive qualities, before the explosion of delirium; but there are observations

also, which furnish undeniable proof, that the suppression or diminution of milk, takes place only after the explosion of insanity.

2. Does the milk act as a foreign body, in those accidents which follow confinement or lactation?

The ancients believed, that the milk was conveyed to the brain, just as they thought that it was sent to other organs; and attributed to metastasis, all the accidents which followed its diminution or suppression. Sennert believed, that the delirium, under these circumstances, is the effect of the vapors, which pass from the uterus to the head. Levret assures us, that milk has been found within the cranium. Boerhaäve opposed the treatment of the different pathological phenomena which appear after confinement, as different maladies; but rather as the same malady, appertaining to the same cause, and consequently identical, but manifesting itself under various forms. Almost all accoucheurs have attributed the different accidents which follow confinement and nursing, to lacteal metastasis. This opinion is popular, and consoles some unfortunate people for the ills, from which there is no release. Nevertheless, the experiments of the moderns, particularly those of Chaussier and Bichat, demonstrate that no milk is to be found in the abdomen of those recently confined, who have died of peritonitis. Nor does it exist in the cranial cavity of those who have died insane after confinement.

The moderns believe with reason, that after confinement, and during lactation, there exists a lacteal diathesis, which modifies all the secretions of the female, and impresses upon them its own character; that the susceptibility of the recently confined and of nursing women renders them more dependent upon external influences; that these influences act upon this or that organ, and cause the development of accidents which characterize the diseases proper to these organs; accidents, which are modified by the general diathesis, that is, the lacteal. Hippocrates, (book v, aph. 40,) says that women whose blood escapes by the nipples, are threatened with mania. However, we see women, who experience a diversion of the menstrual secretion to the nipples, without any other accident. Planchon assures us, that Doctor Piéters of Louvain, had seen a nursing woman, who passed blood instead of milk by the nipples, and who did not become insane. Doublet has many times observed at the hospital of Vaugirard, nursing women whose engorged breasts discharged blood, without any serious results.

Mental alienation, following confinement, is generally cured, if the predisposition is not too energetic. More than one half are restored. Among our ninety-two women, fifty-five were cured; constituting one seventh of the total number of cures obtained at the Salpêtrière, during the four years referred to above. The mental alienation of this class, is terminated by the reëstablishment of the lochia, by the secretion and evacuation of milk, by an abundant leucorrhœa, by mucous and sometimes sanguinolent alvine dejections, by the return of the menses that have been suppressed ever since the beginning of pregnancy, and by subcutaneous suppurations; very rarely by pregnancy. The duration of the attacks is variable. Of fifty-five cures,

4 took place during the 1st month;
7 " " 2d "
6 " " 3d "
7 " " 4th "
5 " " 5th "
9 " " 6th "
15 during the following months;
2 after two years.

Therefore, thirty-eight, or rather two thirds of the cures, took place within the first six months after the attack of mental alienation.

If the cures of the recently confined are frequent, we must admit that these patients are disposed to relapses, when a strong predisposition has preceded the first attack. We may prevent this disposition to periodicity, by avoiding the circumstances which, having produced the first, may occasion the return of new attacks of insanity. They are prevented by avoiding pregnancy.

I was not a little surprised, whilst arranging the notes which I have made respecting our ninety-two women, to find but six deaths.

1 after six months from confinement;
1 after a year;
2 after eighteen months;
1 after three years;
1 after five years;

Therefore, the mortality is only one eighteenth, among women, insane in consequence of confinement, during, or after lactation. It is only one fifty-third, with respect to the mortality of the whole division of the insane connected with our hospital. How happens it, that the abdominal affections which occur after confinement, are so often mortal, whilst the cerebral maladies, which take place at the same period rarely prove fatal? This sketch is not perhaps useless, with respect to the physiology of the brain, and the appreciation of the influence of this organ upon organic life. The opening of the bodies of those who have been confined or nursed, and have died after having been insane a longer or shorter period of time, offers, strictly speaking, nothing in particular; nothing which enables us to recognize the material cause of this form of alienation, or to discover its seat. Selle, in his collection of observations, states that he found, poured out into the brain, a great quantity of pus, in the case of a woman who had died after a second confinement, and had suffered from an attack of mania, in consequence of a preceding one. I found serum among the folds of the arachnoid membrane, as in other cases of insanity, but never any thing that resembled milk. These are the albuminous effusions, which have been mistaken by some authors.

Finally, it would be as strange to find milk in the brain after confinement or lactation, when there was suppression of this secretion, as to find menstrual blood in the cavity of the cranium, in females who have become insane after the suppression of the menses. When insanity is complicated with puerperal peritonitis, we find effusions, and false membranes, in the peritoneal cavity. The treatment of mental alienation, which occurs as a consequence of confinements, during or after lactation, has undergone many changes. Most authors, frightened undoubtedly by the violence of the symptoms which these cases present, have regarded them as incurable. Puzos admits that he partook of this error, after several fruitless efforts to overcome it. However, he at length persuaded himself, that by the use of powerful evacuations, both by bleeding and purging, we could change this disordered condition of the brain; but that the greatest efforts of art, were for a long time necessary. Deceived by the gravity of the symptoms, practitioners have, almost always, carried to excess, the means which they employed. They bled to the utmost, and suppression of the lochia fortified them in the belief of the correctness of the practice. Yet a too copious lochial discharge causes insanity. Haller states, that a woman was deprived of the faculty of thought, in consequence of a too abundant lochial discharge.

I relate, in the second part of this memoir, a case of mania, which occurred in the person of one recently confined, who had had a uterine hemorrhage, for eight days. Boerhaäve and Van-Swieten* inform us, that blood-letting

* Comm. in H. Boerhaäve Aphorismos, Paris, 1769, aph. 1332.

ought not to be employed, except in case of the utmost necessity, not even when the lochia are suppressed. By debilitating, say these authors, bloodletting injures, rather than benefits the patients. Without doubt, this is the result of the indirect force. The lassitude and exhaustion which follow confinement, should have caused them to beware of appearances. They were in the habit of prescribing for a time, the most energetic purgatives, drastics and neutral salts. At a later period, they preferred the milder purgatives. In cases attended with suppression of the milk, they endeavored to bring it back to the breasts, by the application of cupping glasses, and by suction, or else they purged. If the disorder proved rebellious, they recommend a new pregnancy and nursing, and because it has sometimes happened that this advice has proved useful, they have made of it a general precept. I am confident that it succeeds, only when alienation is accidental, and does not depend upon a serious prior, or predisposing cause. Bleedings ought to be employed cautiously during the first stage. When the sanguine temperament predominates, and there are signs of plethora or congestion of the brain, leeches to the vulva or thighs, are useful. The cups, vesicatories and sinapisms, applied, now to the legs or thighs, and now to the neck, in connection with a ptisan slightly sudorific or purgative, following the tendency of nature, will be preferred to means called heroic.

Some persons recently confined, have been cured by the employment of purgative enemata. I have prescribed with success, immediately after confinement, enemata, prepared with four ounces of sugar, and a sufficient quantity of milk. I recommended three of them a day, the patients observing, at the same time, a strict regimen in every respect. An emetic, repeated several times in succession, has also been successful among subjects remarkably lymphatic. It sometimes happens, that vesicatories, which have not succeeded at the commencement of the malady, and during its period of irritation, produce the best effects, when renewed, sometime after the invasion of the disorder. Tepid baths, especially the hip-bath, and sometimes hot baths, second wonderfully the other curative means, when the patient has passed to the chronic state. Cool or cold baths are dangerous. When the malady persists, especially among nursing women, if the menses are not reëstablished after the use of evacuants, we shall find advantage from applying leeches to the vulva, and cupping-glasses to the thighs; employing emmenagogues, and other remedies, suited to recall the menstrual flux.

It is unnecessary to remark, that women who have become insane in consequence of confinement and lactation, ought to be submitted to the same general principles of treatment, with other insane persons; that isolation, the aids of hygiene, and moral means, ought not to be neglected, and that these alone have sufficed to effect a cure, although more rarely, than in other forms of mental alienation.

PART SECOND.

Case I.—P. Y. E——, fifty-three years of age, belongs to a family, many of which are insane. One of her cousins became insane in consequence of her confinement. E—— begins to menstruate at the age of sixteen without accident. Soon after, she grows tall rapidly, and at each menstrual period experiences colic pains. Her disposition is mild, yielding and diffident, and she resides in the country.

Married at twenty years of age, she becomes the mother of five children. On the fourth month of the fifth pregnancy, she is frightened by a man who runs through the street with a drawn sabre. From this time she has presentiments. She fears that her confinement will not be fortunate, and is persuaded that she shall become insane.

Thirty years of age: she is happily confined on the 15th of April, 1811. Three days subsequently, she is seized with uterine hemorrhage, which occasions fears for her life, and ceases only at the expiration of eight days. At this time, E—— is active, and excited, but free from delirium. A tonic regimen is prescribed, and the secretion of milk takes place. She nurses her infant, but on the twenty-ninth day becomes delirious, commits a thousand extravagances, and wishes to destroy herself. She strikes and abuses those about her, and for fifteen days, obstinately refuses to eat or to drink. On the forty-fourth day after her confinement, vesicatories to the limbs and a full diet are prescribed. She continues to nurse her child, although she has little milk. *Sixtieth day.* The milk has become abundant, and the patient eats well; nevertheless mania continues. Some days after, she is brought to the Salpêtrière, July 25th, 1811. She is sad, and does not speak. The abdomen is distended. The infant is removed, and on the following day there is fury.

July 27th. A laxative drink is prescribed, a vesicatory to the neck, and camphorated liniment is applied to the breasts, which are distended with milk. A whitish mucous discharge takes place from the vulva, the vesicatory discharges very abundantly, and the alvine evacuations are free.

Aug. 20th. The vesicatory has ceased discharging, and the patient speaks and walks more readily. She eats little, digestion is easy, and the breasts no longer contain milk.

Sept. 6th. She is better, although sad. She replies correctly, labors, and we consider her convalescent.

Oct. 1st. She is profoundly melancholy, refuses to speak, to take nourishment, or to exercise.

Oct. 3d. A vesicatory is applied between the shoulders, and followed by a febrile movement, which persists for fifteen days.

19th. Cessation of the febrile symptoms. During the continuance of the fever, there is a progressive return of reason.

22d. Her health is improved, and is so understood by the patient, who speaks without repugnance, and gives an account of what she has experienced. (*A laxative drink*).

Nov. 10th. E—— has seen her relatives, and appeared very well at the interview. There is a return of vital energy, and a moderately full habit of body. (*Tepid baths, and aromatic drinks*). The menses return.

December. Vesicatory ceases to discharge, and convalescence is confirmed.

Dec. 10th. This woman is discharged eight months after her confinement, seven after the invasion of the delirium, and four and a half after her admission into the hospital.

Case II.—T. J. M——, fifty-one years of age, is admitted at the Salpêtrière June 30th, 1812. She has a sister who, after her confinement, became insane, and still remains deaf. Our patient is tall, having chestnut colored hair mingled with white. Her eyes are large and dark, face flushed, skin brown, physiognomy changeful, abdomen voluminous. When a year old, she had variola. At ten years of age, she had a severe illness, during which, a uterine hemorrhage took place. Eleven years of age, menstruation abundant, and followed by colic pains after each menstrual period. In youth her health is feeble, and she suffers from hemicrania of the left side, which persists for twenty-four hours. She is afflicted also, with epigastralgia.

Twenty-five years of age. M. marries, and is better since her marriage, at least in appearance. Twenty-six. First confinement. Mania and fury, which persist up to the period of the second pregnancy. Her second confinement terminated happily. Since that period, she has been confined twelve times, her confinements in each instance being laborious, and followed by mental alienation of a month or six weeks' duration. Thirty-nine. Apoplexy, follow-

ed by hemiplegia. Forty-seven years. After a severe fever, she suffered from mania and fury, which lasted for five months, since which she has had irregularities of menstruation, and cephalalgia. A cessation of the menses takes place at the age of forty-nine, without accident. Fifty years. A grave attack of fever occurs, followed by a return of the menses, which recur at intervals of a month, for the space of a year. Fifty-one years. M. loses her husband and is imprisoned. She is immediately seized with mania. When brought to the hospital, June 30th, 1812, she is in a state of mania. There is general delirium, agitation, and at intervals, panic terrors, tears, constipation, etc. Aug. 12th, 1812. She is calm, knows her condition, weeps in view of her situation, and the loss of her husband. She reasons justly, but her mind is feeble. December, M. is well. The menses, which ceased at the first of the previous month, did not again appear. At the time of leaving the hospital she was unusually timid, but enjoying the perfect use of her reason.

Case III.—S. J., forty years of age, was admitted at the Salpêtrière April 22d, 1812. She is tall, her face covered with pimples, her hair is chestnut colored, her eyes of the same color and lively, and her complexion light. She is of a moderately full habit. Twelve years of age, she has cephalalgia and nasal hemorrhages. Thirteen years of age. The menses first appear, succeeded by a cessation of the hemorrhages. Since that period, her menses have been regular, but scanty. Eighteen years of age. The benefactor of this woman is beheaded. She is immediately seized with a general tremor, and her mind wanders for some days. Twenty-six years of age. J. marries, and becomes the mother of three children, whom she nurses. Thirty years of age. She is confined with her fourth child, nurses it, and weans it incautiously. Two days after, she is taken with general delirium, attended by a predominance of religious ideas. She is brought to the hospital, from which she is discharged cured, after four months' treatment. Thirty-six. A new attack caused by the absence of her husband. She is admitted a second time, at the hospital, May 28th, 1810, from which she is discharged June 21st, 1811, at the end of thirteen months. Thirty-nine. Fifth confinement; seven months after which, she weans her child. The day but one afterwards, she is seized with delirium, attended with imaginary fears. She is taken to a private hospital, where an eruption takes place over her whole body, which, at length occupies only the face. At the expiration of twenty months, this patient is brought to the hospital, April 22d, 1812. She is sad, melancholy, and in despair. She has also religious terrors. May 24th, 1812. A discharge from the left ear. Since that period she is more rational, judges correctly of her disease, eats and sleeps well. June. Tepid baths, pimples upon the face, eyelids red, vesicatory upon the arm. From this period, convalescence. This woman was discharged, Aug. 11th, 1812, enjoying the use of her reason. All the attacks were announced by sadness, uneasiness, and inaptitude for her ordinary occupations. By degrees, the mind became lost. During the attacks, she experienced a burning and confused state of the brain.

Case IV.—D—— S. D., forty-one years of age, was admitted at the Salpêtrière, June 19th, 1812. She is of medium stature, her hair is of a chestnut color, her eyes blue, her complexion light, her physiognomy mobile, and her habit of body moderately full. This woman has an uncle and an aunt who are insane. She met with a fall upon her forehead, when nine years of age. Traces of the cicatrix are still distinct. When fourteen years of age she is afflicted with Psora. Sixteen years of age. The menses appear, preceded by headache. They are both scanty and irregular. At twenty-six she marries. The menses from this period are more abundant. Leucorrhœa also

exists. The pain in the head is more severe. At the age of twenty-seven years, during her first pregnancy, she meets with domestic trials. Her husband having undergone an operation unknown to her, she is frightened, on being apprised of it. Her mind wanders, and she becomes furious. She is now thirty-three years of age. She is treated at Charenton, and the attack lasts five months, the understanding remaining slightly enfeebled. She is again confined at thirty-five years of age. At the age of thirty-seven years, on the third day of her third confinement, slight opposition was followed by delirium and fury. Six days after, she was admitted at the hospital, from whence she was discharged at the expiration of ten months, the attack having lasted for six months. Forty-one years. Domestic troubles together with slight opposition, bring on a new attack of fury, which continues for a few days. She was brought to the hospital June 19th, 1812, and after some days became calm, but irrational. Aug., 1812. She converses much, and for a long time; she relates all that she ever knew, saw or heard, and with great incoherence, both of ideas and language. She enjoys, however, long intervals of reason. October. She is calm and labors, but is, at brief intervals, irrational. December. This third attack terminates in dementia.

Case V.—L——, the offspring of an insane mother (her daughter is insane, and her grand-daughter died a maniac), is of medium stature, her hair of a chestnut color, her eyes and skin brown, and her physiognomy mobile. At the age of fourteen or fifteen years, the menses merely make their appearance, and are suppressed for a year afterwards, with chlorosis and fever. At the age of sixteen years the menses return, since which, she has had thirteen children. At the age of twenty-three years, she first becomes a mother. From that period, the menstrual flow is irregular and scanty. Twenty-nine years. Her infant having died some days after her fourth confinement, she becomes a maniac from excessive grief. She is treated at the Hôtel-Dieu. The menses are suppressed for a year, and a cure takes place after eighteen months. Since this period, at each confinement, immediately after the secretion of milk takes place, she is seized with mania: now, with suppression of the lochia and menses; now without suppression. The attacks last, usually, one year. Each attack is announced by abdominal pains, which extend to the uterus, and are attended with the sensation of a foreign body resting upon the rectum. The attack makes its irruption by cries and convulsions.

At length, the fear of becoming insane produces delirium. She becomes agitated, and cannot refrain from speaking and walking about. A thousand hallucinations augment her delirium. She hears persons speaking whom she does not behold, and sees strange objects which frighten her. She suffers from insomnia, palpitations and constipation. During the attack, she no longer suffers from leucorrhœa, and the ozæna is not observable. Forty-five years. Last confinement. Attack more violent than the preceding ones. Forty-nine years. She now suffers from flatulence, which painfully distends the abdomen, and embarrasses the respiration, especially when she has eaten. She then suffers more than at any other period. About the age of fifty years, the menses cease flowing, without an outbreak of delirium. Fifty-three years of age. Her husband joins the army, and she has a new attack. She suffers from *winds* that stifle her, *and which ascend to her head.* Then reason wanders, and she has a thousand hallucinations of hearing and sight. She has, also, convulsions. The paroxysms are renewed, ordinarily, every two days, and are announced, like the attacks, by cries. This state persists for six months. Since this attack, she has enjoyed her reason perfectly, but in spring and autumn, experiences, for some days, a convulsive trembling of the limbs.

At the age of fifty-nine years, Dec. 1811, she is severely frightened. Nine days subsequently, she is suddenly seized with abdominal pains, extending to

the uterus, and convulsions; terror, delirium, a desire to walk about and to run. Hallucinations are present. She is aware of her condition, and demands that she be conducted to the Salpêtrière. Admitted at the Hôtel-Dieu, every thing appears changed, and in the utmost confusion. She hears one utter a cry, on seeing a surgeon making a vaginal examination and displaying his hand tinged with blood. L. believes that she every where beholds intestines floating about, and the smoking of blood. She is in the greatest fright, nor can she dissipate these phantoms, although she knows that she is deceived. Foot-baths are administered, and she is bled from the arm. All the symptoms are aggravated, and her delirium no longer permits her to recognize any thing. Her intelligence is overturned, and she has no longer a sense of her delirium. After two months, she is brought to the Salpêtrière. March 25th, 1812. The abdomen is distended, habit of body moderately full, skin brown, physiognomy mobile, and expressive of fear. There is delirium, constant desire to move about, constipation, and sometimes convulsions, particularly during the night. We bathe the patient, and administer cooling drinks. She gradually becomes calm. In July and Aug. she becomes tranquil, walks about less, and labors a little while at a time. September. The patient awakes to a consciousness of her condition, and feels herself sufficiently strong, to dissipate her hallucinations and vain fears. Moreover, she is very calm, and reasons correctly. On the 12th Sept. 1812, she leaves the hospital well; cured of her eleventh attack of mania. Since that period, she has fallen into dementia, attended with trembling of the limbs.

Case VI.—R., thirty-four years of age, was admitted at the hospital, Nov. 10th, 1813. She has a mild, but lively disposition. She is tall, with chestnut colored hair, large hazel eyes, a dark complexion, a mobile physiognomy, and a tolerably full habit of body. At sixteen years of age the menses are spontaneously established, and at the age of twenty-four, she marries. Twenty-six years. On the third day after her first confinement, a lady, having musk about her person, calls upon her. She is immediately seized with delirium, but continues, nevertheless, to nurse her child, who dies at the age of three years. This first attack was characterized by mania with fury, and lasted but two months. It ceased suddenly, after a severe fright. Since the first attack, she has remained exceedingly susceptible. Every spring she has excitement without delirium, which is dissipated by the use of antispasmodics. Thirty years. Whilst weaning her child, aged one year, she descends to the shop of her husband, in which there was some paint. The odor immediately excites delirium, which increases for five days, and is followed by mania with fury. Aug. 4th, 1809, she was admitted at the Salpêtrière. *September.* A very marked remission. R. is calm, and appears rational. Her husband soilcits her discharge, and obtains it on the 12th of Oct. following. From the second day of her discharge, there is a return of the delirium and fury, accompanied with a suppression of the menses, and a distended abdomen. Readmitted at the hospital, the patient becomes calm at the approach of winter. In December, the menses are established, and R. is discharged June 24th, 1811. Thirty-four years. Nov. 1st, 1813. An abortion at two months, attended with colic pains, uterine hemorrhage, and from the following day with loquacity. Nov. 3d. Mania and fury (*tepid baths and leeches to the malleoli*), without remission. The patient is brought again to the hospital. At her arrival, her eyes are haggard, face pale, features of the countenance shrunken, general delirium, mania, fury. Three days after, she is calm, and becomes aware that she is in the hospital. 16th. Menses are wanting. 22d. Patient sees her husband with satisfaction. She is sad, but her replies are correct. (*Tepid baths*). 28th. Fever, attended with gastric embarrassment. (*Emetic, repeated twice*). Abundant dejections, since which her ideas are

connected. She is calm, and labors. Return to reason progressive. Dec. 21st. R. leaves the hospital, perfectly restored to the use of her reason, although the menses are not reëstablished.

Case VII.—M., (admitted at the Salpêtrière April 29th, 1814, at the age of twenty-four years), was the offspring of a mother who died insane. She is tall, with chestnut colored hair, and an expressive eye. Her complexion is sallow, skin brown, physiognomy mobile, and her disposition gay. She has fits of anger, which are dissipated by tears; is indolent and of great susceptibility. From infancy, she has been subject to ophthalmia, and has suffered from headache during her whole life. Six years of age. Psora and frequent nasal hemorrhages. When eleven years old, she has the small pox in its severest form. She is affected with ozæna, and the nasal hemorrhages have ceased. Fifteen years of age. The menses appear spontaneously; since which period her health has been good, and the ozæna has disappeared. At each menstrual epoch, sometimes before, and sometimes after it, she suffers from headache, which is dissipated by vomiting. This woman marries at the age of twenty-three years. At twenty-four, being pregnant, she meets with a fall, and sprains one of her feet. At the fifth month of her pregnancy, the events caused by the approach of the allied armies, give her great uneasiness, and the more, as she is unable to walk, and remains at home alone. At the ninth month of her pregnancy, a Cosack threatens her life. She loses her appetite, and suffers from nervous twitchings. April 21st. On the eve of her confinement, she is frightened anew. 22d. She is confined, and has convulsions for twenty-four hours. 23d. Continuation of the convulsions. At their cessation, she laughs continually, and is delirious. 24th. General delirium, agitation, fury,—refuses to take nourishment. The patient is unwilling to drink any thing but cold water. Symptoms are exasperated during the night. Nevertheless, the lochia continue to flow, though the secretion of milk does not take place. (*Sinapisms to the feet*). The pain caused by the sinapisms, causes the patient to believe that we wish to burn her feet. During her convulsions, she bites her tongue, and the pains which result from it, seem to her to be caused by fire.

She is brought to the hospital April 29th. On her admission, her complexion is sallow and discolored, her eyes constantly in motion, tongue white, breasts flaccid, and her delirium gay. The patient recognizes neither the persons nor objects that surround her. She considers herself an empress, and is constantly affirming that her husband is Louis XVIII, and that all the furniture is of silver, or some other precious metal. She grants favors to every body. Her step is haughty, her tone imperious, and her ideas of grandeur predominant, notwithstanding the most complete incoherence. Her actions present the same disorder, and a similar exaggeration. Appetite voracious. April 30th.—(*Vesicatories to both limbs, and laxative drinks*). Lochia, mingled with a whitish mucus. May 8th. Discharge of matters, at first white. She is more calm, though the delirium preserves the same character. 12th. Continuation of the lochia. (*Same medicines*). Vesicatory discharges freely,—dejections brownish, mingled with mucous matters. Less disorder of the ideas. 15th. She sees her husband, and recognizes him. It seemed to him, that for a moment she recollected herself, and, as it were, came out of a revery. This period however, is very brief, and the delirium continues, but she no longer entertains ideas of grandeur. 22d. Cessation of the lochia,—the vesicatory dries up,—there is more connection in her ideas, and her composure is perfect. The sight of her husband affords our patient pleasure. 24th. Convalescence. She renders a complete account of the motives of her actions during her delirium. The vesicatory has ceased to discharge. 25th.

She experiences a sensation as if stunned, which enfeebles both her body and mind. Aside from this, she is rational, and obtains her discharge.

Case VIII.—L., forty-one years of age, is admitted into the hospital Nov. 28th, 1811. At the age of eighteen, a fright suppresses her menses, and she is melancholic for eighteen months; after which, she enjoys comfortable health, her menses being reëstablished. She is confined at the age of thirty-six years. After the fourth day, the mid-wife having left her, she becomes alarmed, and is much chagrined. The milk is suppressed, she is unwilling to eat, and becomes furious. Her tongue is paralized. The menses reappear at the expiration of two months, and the patient sinks into a profound melancholy, wishing to remain constantly in bed. If she rises, she remains *en chemise*, without clothing. She eats reluctantly, sometimes cries out, and becomes angry without cause, and when she is desired to change her linen, or to eat; to lie down, or to rise up; flies into a passion and strikes. Nothing can induce her to speak when she does not choose to. She sometimes comes to a sense of her condition, and exceedingly regrets her extravagances. The menses have been at all times regular and abundant; constipation obstinate. At the time of her admission at the hospital, the melancholy having persisted for five years, her complexion was pale, her features shrunken, her hair and eyes black. She has also strabismus. She leaves her bed with great reluctance. She passes several days also without eating. Her hair, which had not been combed for five months, was tangled, as if matted and felted, and presented no traces of vermin nor their eggs. It was very clean, and a quantity, amounting to fifteen ounces, was cut off. Care was taken to cover the head with wool. Dec. 5th. To-day apoplectic symptoms were present. (*Sinapism, vesicatory, and a strengthening potion*). 6th. She has spoken some words in a low tone. There is prostration of the vital forces, and paralysis of the left limbs, with diminution of sensibility. 8th. (*Vesicatories to the thighs*). Dejections, which have persisted for many days. The patient offers some appearance of reason. (*Arnica*). 24th. Same state, obstinately refuses food. Jan. 12th, 1812. Unnatural freedom of the bowels ceases. The patient refuses food for about eight days, or rather, takes but a few spoonfuls of sugared wine. The vital forces became progressively extinct, and death takes place, January 20th, 1812.

Autopsy twenty-four hours after death. Hair black; cranium hardened and unequally thick; median line distorted; vessels of the pia-mater injected; brain soft; white substance injected; depression of the convolutions of the brain, corresponding with the suture formed by the junction of the coronal and parietal bones of the right side, near the median line. In this place, the pia-mater was much thickened, and contained serum. The lateral ventricles are contracted on every side; their membrane adheres posteriorly to a great extent, contains serum, and is injected, as well as the choroid membrane. The heart is enlarged, flaccid and full of black blood. The liver is granulated and brown, and the gall bladder distended with bile of a deep brown color, and very thick. The left extremity of the transverse colon has descended into the pelvic cavity. The omentum is very fat, the stomach very much retracted and interspersed with deep folds. The intestines also, are contracted in some parts, and the mucous membrane is red, brown, and sphacelated. We observe some fibro-cartilaginous parts in the proper membrane of the uterus, and the bladder is contracted, very much thickened, and its mucous membrane very red.

Case IX.—Those pupils who attended my clinical lectures on mental alienation, saw at the Salpêtrière, a young woman who was confined Sept. 25th,

1818, and who experienced so serious a disappointment, at not having given birth to a boy, that she was taken with delirium on the first day of her confinement, and became a maniac on the third. The delirium and fury persisted for six weeks, after which, she was alternately, calm and excited. This woman was brought to the hospital, Dec. 7th. On the 11th an enormous deposit took place in the right groin. The delirium persisted, but the calm was perfect. The abscess opened spontaneously, towards the end of the month. The delirium immediately began to decrease. The patient began to convalesce Jan. 15th, and was restored to her family on the 8th Feb. following, four months and a half after her confinement.

Case X.—L., nineteen years of age, is happily confined Jan. 19th, 1819. She exposes herself to the cold air, and becomes delirious on the first day after confinement. The infant cannot nurse, because the nipple is not formed; notwithstanding the milk is very abundant. The delirium increases. The patient strikes her breasts and is unwilling to be clothed. The third day the lochia are suppressed, and on the day following, leeches are applied to the vulva. Overcome by the heat, she rises from her bed, washes her hands, and drinks cool water. The delirium is violent, and the breasts very much distended with milk. They apply leeches behind the ears, sinapisms to the feet, and prescribe an ethereal potion. One month after her confinement, this woman was brought to La Charité, from whence four days subsequently, she was transferred to the Salpêtrière, March 1st, 1819. At the period of her admission, the patient presents the following symptoms; face flushed, features shrunken, the breasts voluminous, resistent, and painful,—general delirium. She refuses to be clothed, has a feeling of fear, cries aloud, is abusive in her language, and suffers from nervous agitation. March 15th, the right breast is enormously distended, the skin livid and violaceous, and fluctuation is perceptible. It is impossible to keep upon it the least covering. Some days after, the surgeon-in-chief of the hospital opens the abscess. From that moment, the patient more readily admits the application of dressings. She is more composed, and is more attentive to what is passing around her. The delirium, however, persists, and suppuration is very abundant. At the beginning of the month of May, a laxative potion, continued for some days, provokes copious dejections. 12th. Although there is still delirium, the patient sees her husband. From this time the progress towards reason was perceptible. The wounds cicatrize, which are successively formed, upon the right breast. We regarded her convalescence as confirmed from the 20th of the month of May, and on the 27th she was restored to her family, enjoying perfectly the use of her reason, four months after her confinement.

Case XI.—Mad'lle M., of medium height and nervous temperament, having black eyes, and a dark complexion, was still at that age when young people know of love, only by what they read of it in romances, when her mother accompanied her to a ball. A young man, with whom she was unacquainted, pays his respects to her. She immediately experiences a singular and painful internal commotion. Some days afterwards, she experiences the same impression. Notwithstanding, this young man is respectable, and unites in himself all those qualities that can flatter a young person, whose affections are not already engaged. He speaks of marriage, but she experiences an insuperable aversion to this proposition, without being able to offer a reason for her repugnance. Her parents insist, and she consents. But every time that she sees him to whom she is betrothed, she feels a painful internal sensation, whilst, during his absence, she believes she loves him, whose presence produces upon her an effect so strange. At length she marries. The first months of married life are the occasion of great suffering to her, without exciting any sus-

picion of the fact on the part of her husband. She loves him, yet his presence makes her ill. She becomes the mother of two children, whom she nurses, and cares for, with the utmost maternal tenderness. She weaned the second, during the absence of her husband on a voyage. She becomes uneasy on account of his absence, and weans her child without the least precaution. From uneasiness, she passes to melancholy and sadness. Her friends desire to soothe her, and direct her mind to the consolations of religion. Her tender and devoted spirit imposes upon itself privations, and she offers prayers, which are prolonged into the night. She abandons her ordinary occupations, refuses every kind of exercise, and eats nothing. At length, delirium appears. She looks upon her children without satisfaction. She is often tempted to destroy them, *in order to preserve them from the extreme misfortune into which she believes they have been plunged by the abandonment of her husband.* She has lost much flesh, and her complexion becomes sallow. There is loss of rest and constipation, but the menses recur at regular intervals.

After six months' absence, she receives her husband with coldness. The lypemania increases. She many times recommends that they withdraw her children, and that they do not bring them to her without some special purpose. The voice of her children, or their noise in an adjoining room, produces a state of suffering and agony, which is clearly depicted upon her countenance. Her husband on one occasion, brings her children into her presence. She becomes pale, shudders, and comes near falling into a swoon. Another time, she pretends to embrace, with a view to stifle them. At the expiration of a year, she is committed to my care. She is very much emaciated, has a sallow tinge, and her eyes are fixed and convulsive, as well as the features of her countenance. The skin is dry and arid, and of a burning heat. The pulse is feeble and frequent. She refuses nourishment, and respiration is difficult. She is sad, refusing all kinds of exercise, and every mode of diversion. She does not speak, but weeps much. She is often impatient when any one discourses with her respecting her condition, especially when offered any hope of a cure, which she regards as impossible. She demands to be shut up in a hospital, and takes all the remedies that are prescribed for her. After eight months of isolation, during which, nothing could withdraw the patient from her despair, nor cause a thought for her husband or children to spring up in her breast, after having exhausted means the most varied, I order a vesicatory to be applied to her left arm. Until this period, I had not thought its employment advisable, in consequence of the emaciation and irritability of the patient. On the following day, the vesicatory assumes an erysipelatous aspect. The arm swells, and discharges a thick and whitish fluid, very abundant and fœtid. At the end of a month, she is less sad, and less averse to consolations and diversions. On first seeing her husband, she seemed to be indifferent, but shortly manifested pleasure; and was at length restored to her family, after an illness of two years. She hears her children spoken of without dread, but is still unwilling to see them, distrusting herself, she says. But she oversees her household affairs, goes into society, occupies herself, and continues to improve. It is not until the expiration of six months more, that she desires to have her children with her, and to direct their education;—a duty, of which she acquits herself, with all the tenderness, that she had lavished upon them previous to her illness.

Case XII.—C. was born in the country, labored in the fields, and married a brutal husband. At twenty-six years of age, she becomes pregnant. She is attacked with psora, and her husband causes her every species of mortification. Nevertheless, she is confined; but two hours thereafter is beaten and mal-treated by her husband, who throws a bucketful of cold water upon her body. The same day mania bursts forth, attended with fury. The lochia

are suppressed, and the menses do not appear. All the means employed for the cure of this unhappy person prove fruitless. A maniac and furious for four years, she is at this time in a state of dementia.

Case XIII.—Mad'lle B., twenty-five years of age, (descended from a father, subject to cephalalgia, which he was accustomed to relieve by the application of ice to the head), is endowed with a peculiarly nervous temperament, a glowing imagination, and a lively and sensitive disposition. The culture of letters and the arts, which constituted the basis of her education, by according with her native tendencies, contributed to the irregularity of her passions. At the age of twenty-four years, she formed a prudential matrimonial connection. Her husband entered the army. Mad'lle B. committed certain improprieties, and is severely censured by her relatives and friends. A young man, of an agreeable exterior, was prodigal of his attentions to her. She becomes enamored, and after a struggle of some weeks, deserts the house of her husband, and retires to that of her lover, where she experiences mortifications of every kind. She becomes pregnant. Her pregnancy is disturbed by disquietudes, by jealousy, by the desire to please her lover, by the fear of a severe illness, in fine, by the most painful regrets. Nevertheless her confinement is a happy one. On the day but one succeeding this event, she sprinkles her bed and chamber with odoriferous waters, and walks about on her naked feet, notwithstanding the cold. From the third day her actions were irrational. On the eighth, she has affectionate interviews with her lover. On the ninth, she overturns every thing in the house, and sports with her lover as if he were a child. Little milk is secreted for her infant. On the fourteenth day after her confinement, she is brought to a hospital,—a circumstance that makes a very strong impression upon her mind. Her reason is altogether lost. She destroys every thing, and becomes furious. The constant attentions which she pays her child, are more injurious than useful, both to the one and the other. She passes twenty-fours hours perfectly naked, concealed under a stair-case. On the twentieth day of her illness, March 11th, 1800, the patient is committed to my care. Her countenance is pale, eyes haggard, the tone of her voice harsh and elevated, breath fetid, breasts flaccid, and her agitation continual. Her desires are strange. She is loquacious, makes obscene remarks, and has an irresistible propensity to tear. She is slightly warm and moist, and has no uneasiness respecting her child.

On the twenty-first day after her confinement and sickness, she takes a bath, a purgative enema, and a soothing drink. On the twenty-second day, she has a shivering fit, agitation, hatred of certain persons, cries, complaints, an habitual state of opposition, painful reveries, fear, panic terrors, dread of poison and of death. She has also, no connected ideas. On the twenty-third day, the child dies, without occasioning any grief on the part of the patient. The lochia do not cease. On the twenty-eighth day, the menses appear and continue until the thirty-third. Since then, there has been composure with sleep, but delirium. On the thirty-ninth day, there is a return of reason. Her lover visits her, and she is agitated from that day forward. On the forty-eighth day of the attack of the malady, she is composed, and is again visited by her lover. This is followed by agitation, and insomnia. The patient experiences the greatest excitement. The delirium is at its height. She converses with her lover, though he is absent. She thinks he is in the walls, in her chamber, and even in her bed. Often, during the day, she takes the clouds for balloons, and calls aloud upon Garnerin the æronaut, to make with her a journey to the moon. She calls for her husband, father and mother,—tears every thing, and is often naked. She is loquacious, laughs loudly, and does not rest. During this period, she takes the whey of Weiss every day, which is followed by mo-

derate evacuations. On the sixty-first day her menses return again, but cease on the following day. On the sixty-seventh day, she takes a cold bath and douche. From the former she makes violent efforts to escape, and on leaving it, suffers from extreme prostration, a general trembling, and an enfeebled voice. A half-hour afterwards, the patient desires to leave her bed, and take food. The same treatment is continued until May third, when the bath is suspended, in consequence of the appearance of the menses.

On the seventy-fourth day, May 10th, the menses cease. On the seventy-fifth day, there is composure, unmeaning gestures, and taciturnity. Seventy-sixth day, the tepid bath and douche. Seventy-seventh day, composure, sleep. Eightieth day, the douche again employed. She obstinately refuses to dress herself. Eighty-second day, she enjoys some hours of reason. Eighty-third day, some stains of a hemorrhoidal flux. From the eighty-fourth to the ninety-fourth day, composure, but little sleep. On the ninety-sixth day of the disease, June 2d, a hemorrhoidal flux. 3d. Agitation, extreme mobility, obscene discourse, cries, declamation. 5th. Douche repeated. 9th. Voracious appetite. 11th. Menses appear, during which, the patient is extremely agitated, is passionate, and contradicts every thing. 16th. Cessation of the menses. 19th. Tears; she becomes conscious of her condition, and is desirous to be restored. 30th. Composure, tears, sleep. On the one hundred and twenty-fifth day, July 1st, she suffers from hysterical syncope. 4th. Calm, and rational; nevertheless the patient destroys every thing within her reach, and abuses those who serve her. 6th. Progressive return of reason, hysterical syncopes. Visit of her lover. 8th. Syncope; febrile movement, preceded by rigors. 12th. Fever continued, presenting the symptoms of catarrhal fever, with evening paroxysms, and frequent attacks of hysterical syncopes,—progressive return of reason. 13th. Appearance of the menses, which flow abundantly, and cease on the 15th. Fever continues. Notwithstanding, the patient is not irrational, tears nothing, and eats moderately. We converse with her about her affairs, and her situation with respect to her husband. 21st. Returns to the house of her lover, where she has an attack of colic, and faints. 24th. Urine abundant—depositing a whitish sediment. From the 8th, the period of the invasion of the fever, we had recourse to a strengthening regimen, light tonics and exercise. 26th. The fever which presented all the characteristics of a continued catarrhal fever, became a tertian intermittent, and persisted all the autumn, and a part of the winter. In the spring following, the fever ceases, the patient gains flesh rapidly, and recovers her gayety and ordinary vivacity. Since that period, she has obtained a divorce, married her lover, and become the mother of two children, whom she has nourished and educated with the greatest care. She subsequently met with the greatest misfortunes, and experienced domestic trials, without suffering in the least from aberration of mind.

Case XIV.—N., thirty-one years of age, having always enjoyed excellent health, two months after her confinement, experienced a most trying mortification, in consequence of which, she became insane. At the moment of her admission at the Salpêtrière, her countenance is animated, her eyes sparkling, her skin moist. The patient passes alternately, from cries and vociferations, from extreme agitation and loquacity, to repose and the most obstinate silence. She walks about at a rapid pace, pouring forth abuse, when suddenly she stops, becomes motionless, her eyes fixed, absorbed and indifferent to surrounding objects. Thus she passes her days and nights, without sleep or repose. This delirium continues for five months. She speaks simply in a low voice, and makes mysterious signs. Suddenly she utters a piercing cry, thinking that she recognizes the persons who surround her, and becomes furious towards

them. Not far from the middle of the fifth month, her countenance becomes sallow, brown, and afterwards of an earthy hue. Her death takes place Oct. 6th, 1815, six months after her confinement.

Autopsy. Cranium thick and hardened; meninges and brain healthy. Thoracic viscera in their normal state. Sero-purulent liquid in the peritoneal cavity. Peritoneum thickened, greyish through its whole extent, and coated with a yellowish, albuminous covering. Mucous membrane of the alimentary canal, healthy and coated with a yellowish mucus. Liver soft, and easily torn.

Case XV.—M. J. B., twenty-eight years of age, is the offspring of a mother, who, when forty-eight years of age, suffered from a slight attack of apoplexy. When nine years old, she has the small pox. From seventeen to eighteen years of age, she is subject to violent attacks of cephalalgia, which disappear after the first appearance of the menses. At twenty-eight years of age, she is happily confined. She experiences many trials, and her lover abandons her. Six days after her confinement, delirium bursts forth. On the ninth day, she is admitted at the Salpêtrière. At the time of her arrival, she is very much agitated, has hallucinations of hearing, mysterious voices commanding her to injure persons by whom she is surrounded. She believes herself in society, and affirms that she has never suffered from head-aches, but experiences acute pains in the limbs. No lochia. A large vesicatory is applied to the back, prolonged tepid baths are administered, and at first cooling, then laxative drinks. After some days, the delirium diminishes, and the menses are established. Convalescence is protracted. The patient herself demands that the vesicatory should be continued. Reason is soon established, and she goes from the hospital restored, after the second return of the menses.

EPILEPSY.

Synonyms and symptoms.—Medium duration and frequency of attacks.—Lunar influences.—Notices of the leading mental peculiarities in 339 cases of Epilepsy.—Vertigoes epileptic, their effect upon the mind.—Pathognomonic characteristics of Epilepsy.—Causes.—Organs upon which they primarily act.—Analysis of post-mortem examinations.—Diagnosis.—Divisions and subdivisions.—Feigned epilepsy.—Prognosis.—Remarks preliminary to the details of treatment.—Attacks often lessened temporarily in frequency by a change of remedies.—Treatment, with a notice of numerous remedies employed in ancient and modern practice, with their effects.—Fear as a curative agent.—Hygienic influences.—Traveling.—Music.—Moral influences.

The symptoms of epilepsy are so extraordinary, so entirely beyond the reach of any physiological explanation, and its organic causes so entirely unknown, that the ancients believed it to depend upon the wrath of the gods. Although Hippocrates may have combated this prejudice, he has preserved for it the appellation of the *sacred disease*. Areteus calls it *Mal d' Hercule*. It is the *morbus comitialis* of Pliny; the *morbus sacer et major* of Celsus; the *morbus sonticus* of *Aulus Gellius;* and the *morbus caducus* of Paracelsus. The sacred writers denominate those who suffer from this malady, *lunatics*. Epilepsy, which is confounded with eclampsia by many moderns, is designated in France, by the names, *mal-caduc*, *haut-mal*, *mal de terre*, *mal de saint Jean*, *mal des enfans*. In the west of France, epileptics are called *tombeurs*. The first intimation of an epileptic attack, is usually a cry from the patient, who immediately falls and suffers from convulsions of every grade of intensity, from slight convulsive movements, to those of the most violent and terrific character. Consciousness is entirely suspended. The hair stands on end, the brow is knit, the eye-brows are depressed and drawn nearer together, the eyes project, and are haggard or crossed. The eyelids sometimes open and shut very rapidly for some minutes, leaving exposed and fixed, the inferior portion of the globe of the eye. In other cases, the eyelids remain open, and the eyes, strongly injected, seem to start from the orbit, and move convulsively. The face is bloated and flushed, livid and ecchymosed. The muscles of the face produce hideous grimaces, the lips are prolonged, project or extend towards the ears, and are covered with a frothy saliva. The lower jaw is fixed in contact with the superior one, or is extended even to luxation. The tongue is lengthened, swollen, and projects from the mouth; is seized, bruised, torn, and cut between the teeth, the grinding of which is so violent, that they are sometimes broken with a loud noise. The voice consists merely of groans and sighs, similar to that of a person strangling. Sometimes epileptics utter

howls, more or less prolonged and frightful. There are some, who utter words without connection, extravagant and strange, which knaves have caused to pass, and simple people have taken, for the inspirations of demons.

The vessels of the head are so much distended, and the carotids beat with such force, that they seem ready to burst. The whole head executes rotatory movements, is carried to the right or left, or from before backward. Sometimes it is fixed in one or the other of these attitudes, or is thrown backward. The neck is rigid, and this fixedness or rigidity, cannot be surmounted by the greatest efforts. The trunk suddenly prostrated, now upon the back, and now upon the abdomen, raises itself only to fall again. It turns itself in various directions, bends itself, rolls upon the ground, or reposes in a true tetanic condition. The arms, hands and fingers, the thighs, legs, feet and toes, participate in this state. The flexure of the thumb is so common, that it has been regarded as a sign of epilepsy.

The muscles of organic life are not indifferent to this scene of suffering and terror. The pulse, at first small, is developed, becomes frequent, hard, unequal, and sometimes stops. Respiration is slow or hurried, convulsive or stertorous. Eructations, borborygmi and vomiting, the involuntary emission of urine, semen and feces, the perspiration which bursts from every pore, the blood, which starts from the nose, eyes and ears, all indicate the violent state of the organism. Sensibility seems extinct, so utterly impossible is it to arouse the patient by whatever means we employ. But when the vital principle seems to be yielding to so much violence, and the patient about to suffocate, the muscles relax, respiration becomes more easy, the pulse slackens or is developed, sensibility is restored, the convulsions diminish, the physiognomy assumes its ordinary appearance, the mind begins to return, the eyes that have been weighed down, open, and the look is one of astonishment. The limbs, fatigued and painful, need repose. Some epileptics after a sleep of longer or shorter duration, recover their energy. Others, after a long, comatose sleep, awake, and remain pale, languid and feeble for some hours, and even days. Immediately after the attack, and before recovering their senses, both the one class and the other, are affected with carphologia. The exercise of thought is immediately established with the former; with the latter, it becomes free, only after some hours, or days.

No epileptic preserves a recollection of what he has experienced, nor has the least knowledge of it. All are sad after the attack, as if ashamed, and are exceedingly susceptible. Epileptic attacks are not always so formidable. The convulsions are not always general. There are persons who have only the premonitory symptoms of an attack. Others, experience only the earlier symptoms, which cease promptly. Sometimes, it is only a stunning sensation, a general shivering, followed by rigidity, or rather, a simple convulsive movement of a limb, the head or lips, with a momentary privation of thought. I have been consulted in behalf of a young lady, whose father is epileptic, who is seized with her attacks, in the midst of a company, while walking, or on horseback. She does not fall, but her eyes are convulsed, and her looks fixed. The attack lasts but a few seconds, and the patient resumes the conversation at the phrase where she left off speaking, without suspecting that any thing has happened to her, and unless she had uttered a cry, no one would have observed what had passed. With the progress of age, the attacks become more complete. Poupart* cites a similar case. Some epileptics merely shake the head, arms or legs; others only close the hands; some run, and others turn round and round.

Doctor Esparron recognized an attack of epilepsy, by a simple convulsive movement of the lips. The convulsions merely, of the eyes and thorax ena-

* Memoirs of the Royal Academy of Sciences; 1705.

bled Pechlin to ascertain the same fact. These attacks, which may be mistaken, serve as a prelude to those, which by degrees, or with age, become complete, or rather intercalate with complete attacks, which leave no doubt respecting the nature both of the one and the other. This is epileptic vertigo. Among infants, the attacks are less violent, and may be confounded with ordinary convulsions. Children have vertigoes, and their limbs totter. Perspiration breaks out upon the face, which becomes red and bluish; the eyes converge, and are fixed towards the root of the nose; the convulsions are general or partial, and the jaws are set, or the lips covered with froth. When the attack has been light, children retain a stupid expression, are somnolent, complain of the head, and lift the hand to it. They are unwilling to nurse. If the attack has been violent, they fall into a profound sleep, from which they awake in a stupid condition. There are cases, in which attacks occur suddenly and without any premonition, particularly in constitutional epilepsy.

There are others, which are announced by divers accidental circumstances, especially in sympathetic epilepsy. They are almost always foreseen, before the loss of consciousness takes place. Epileptic persons experience convulsive movements and acute pains. They experience a sensation of cold, a vapor (*aura epileptica*), in the head or face; in one of the arms or hands; in the thighs, legs or toes; in the chest, stomach or uterus. These various sensations are propagated like a vapor, along the limbs, trunk and neck, towards the head, and when it reaches the brain, the attack bursts forth. Epileptics profit by these presentiments, in order to guard themselves against grave accidents, which might result from a fall. It is at this time that ligatures are to be applied, that some physicians have advised the extension of the limbs, walking about, and the inhalation of some substances, strongly aromatic or stimulant. The redness at the root of the nose, the turgescence of the veins of the neck, the throbbing of the temporal arteries, the discoloration of the face, vertigoes, supineness, ringing in the ears, frightful reveries, palpitations and the flow of tears, are the precursory signs of angiotenic or plethoric epilepsy. Some, previous to the attacks, smell disagreeable odors; others have a repugnance to food, which, together with vomitings, borborygmi and involuntary dejections, presage gastric epilepsy. Some are more irritable and choleric, and in other cases, the intellectual faculties are exalted on the day previous to, as well as on that of the attack. Immediately before the attack, says Areteus, some epileptics think they see a shining light, of a purple or dark color; others hear a sound, as if some one was striking a resisting body with a stone or club. There are those who have hallucinations. We have at the Salpêtrière one epileptic, who turns round and round for some minutes, and another, who runs with all her might until she falls. Nothing can stop them.

The condition of an epileptic, forewarned by internal sensations, of an attack more or less immediate, is so painful and trying to many of this class, that they anxiously desire that it should occur; seeking for those influences which experience has taught them, were favorable to its invasion. Some, with this intention drink wine and liquors; others excite anger, by seeking a quarrel with the first person they meet. The duration of the attacks is very variable. Some last but a few seconds; others, for some minutes. The medium period, is from five to fifteen minutes. The frequency of the attacks is not more determinate. They recur annually, every six months, monthly, every fifteen days, every eight days, on alternate days, daily, and several times a day. There are epileptics who have complete and very violent attacks, at very long intervals. During these intervals, they suffer from vertigo. The attacks of some have a fixed season of return, and recur at very determinate periods. In some cases, particularly among women, they recur on fixed days. Some-

times the attacks alternate with respect to intensity. There are violent and feeble attacks. These are the forms, which they denominate in hospitals, *le grand et petit mal.* More rarely, the attacks reappear at indeterminate periods, and the epileptic then has several in succession, and at brief intervals. In some instances, the attacks occur during the day; in others during the night; and in others still, during sleep. I have had under my charge a young man, who became apprised of his attacks, only by the fatigue and dullness which he experienced on waking. Several times we succeeded in concealing from him the fact, that he had had an attack.

I have in charge, a man thirty-two years of age, whose epilepsy is complicated with fury and dementia. His attacks occur only during sleep. If it happens, (which is very rare), that he has attacks during the day, he has slept immediately before its occurrence. If we prevent sleep, or awake him in time, the attack is avoided. I have advised the patient not to retire to bed, but to resist sleep by diversion. The attack passes by, but the sleep of the following day recalls it. There is no disease, which has been regarded as more dependent on the course of the moon, in consequence of its periodicity. Nevertheless, the coincidence of the attacks with the lunar phases, is neither so constant nor so regular as has been supposed. Among large assemblages of epileptics, I have not observed that the attacks were more frequent, at certain phases of the moon than at others.

Authors relate, that epilepsy has ceased after the reëstablishment of suppressed hemorrhages, or repelled cutaneous eruptions; after pains in the thighs, ulcers in the throat, or upon the legs; after engorgements of the breasts or testes, and after blindness. This last crisis, is not very rare. Epilepsy is a malady not only formidable by the violence of its symptoms, and a cause of despair in consequence of its incurability; but is still more so, by its fatal effects upon both the body and mind of those who are affected by it. The latter are the necessary consequences of the repetition of the attacks. The former are accidental, and may be prevented. The accidental effects of epilepsy, which I call local, and which may be prevented, depend upon the disasters which take place, at the commencement of an attack. An epileptic person may fall into the fire or into the water, or be precipitated from a window, etc. By falling, he may be wounded, or bruised; he may disfigure his countenance, fracture a limb, or be drowned. These accidents are sufficiently frequent and grave, to furnish important indications in the arrangements of a hospital destined to be occupied by a great number of epileptic patients. The violent and oft-repeated perturbations of the nervous system, which take place in epilepsy, produce necessarily, in time, lesions in the organs of nutritive life, as well as alterations in the brain and its functions. The features of the countenance enlarge, the lower eyelids puff up, the lips become thickened, and the handsomest countenances ugly. There is something uncertain in the look; the eyes wander, and the pupils are dilated. We observe convulsive movements of certain muscles of the face. Epileptics have also a peculiar gait. Their slender arms and legs are no longer in relation with the size of the rest of the body. They become deformed and paralytic. The legs of an epileptic at the Salpêtrière, after a violent attack, became flexed upon the thighs, so that she could not walk. A year after, during an attack, the limbs were extended and flexed alternately. The person who was by the patient at this time, succeeded by some effort, in maintaining the extension of them, and by this happy expedient, this epileptic is again enabled to walk.

The functions of organic life are altered and languish. Epileptics are subject to cardialgia, flatulence, spontaneous lassitude, and trembling. They take little exercise, and become either corpulent or lean. They are strongly inclined to the pleasures of love and onanism. Perhaps the excesses to which

they yield themselves, produce the organic lesions and disorders, which are manifest when the malady has persisted for a long time. In general, epileptics do not reach extreme old age. The cerebral functions and intellectual faculties, by degrees become greatly impaired. Areteus, who has so well described the symptoms of epilepsy, has not omitted to speak of the influence of this malady upon the functions of the brain. Van-Swieten in his Commentaries upon Boerhaäve, remarks, that he has seen many unhappy persons who had been weak-minded from infancy, and that all of them with whose history he had become acquainted, had suffered from attacks of epilepsy. The understanding is altered, and gradually enfeebled; the sensations no longer possess their former vivacity; memory is lost; imagination becomes extinct; and the epileptic sinks into incurable dementia. These fatal effects are the more to be feared, in proportion as the attacks are more violent and frequent.

Assisted by M. Calmeil, medical inspector of the hospital at Charenton, and at that time a pupil at the Salpêtrière, I have collected with the utmost care, the history of those women who occupy the epileptic ward, to the number of three hundred and eighty-five. Of these, forty-six are hysterical. So analogous are the symptoms, that hysteria has sometimes been confounded with epilepsy. There are hysterical persons, who are at the same time, epileptic. But in those cases, a little experience enables us to decide, to which of the two disorders the convulsions to which the patient is subject, belong. Hysterical patients have attacks of mania, and almost all are hypochondriacs, but they do not fall into dementia. I have therefore, to give an account of only three hundred and thirty-nine epileptics,—subtracting the forty-six hysterical patients. Of this number twelve are monomaniacs. Thirty are maniacs, among whom, some have a disposition to commit suicide, and have made several attempts upon their lives. Thirty-four are furious, with three of whom, there is an irruption of fury, only after an attack. One hundred and forty-five are in a state of dementia, sixteen are constantly in this state, the rest, only after an attack. Two have paroxysms of fury. Eight are idiots. One of them has been epileptic only from seven to eight months, and has had but five attacks. Fifty are habitually rational, but suffer from absent-mindedness more or less frequently; or else from exaltation of the faculties. Some have a temporary delirium, and all a tendency to dementia. Sixty have no aberration of the understanding, but are exceedingly susceptible, irascible, head-strong, difficult about their living, capricious, strange; all possess some peculiarities of character. Therefore, two hundred and sixty-nine of our three hundred and thirty-nine epileptics, that is to say, four fifths of them, are more or less insane; one fifth only retaining the use of their reason, but in what a condition! Some epileptics experience internal sensations, from which spring presentiments, which warn them of an approaching paroxysm; and that, although they may have just had one, another attack will immediately ensue.

Many, previous to the entire suspension of sensibility, have hallucinations the most varied. They think that they see luminous bodies, by which, they fear that they may be embraced. They also believe that they see dark bodies, extended and immense, which threaten to shroud them in thick darkness. They hear sounds like the bursting of a thunderbolt, the roll of drums, the clash of arms in the din of combats. They smell odors the most fetid. It seems to them that they are struck, and unmercifully beaten. All these hallucinations inspire them with the greatest terror. Perhaps it is this sentiment, which impresses upon the physiognomy of most epileptics, that expression of fright or indignation, which is peculiar to these patients during the attack. Almost all epileptics, on reviving from the somnolence which follows a complete attack, or after vertigo, are in a state of dementia, which gradually dis-

appears. The reëstablishment of organic sensibility, always precedes that of reason. Many epileptics suffer from a kind of carphologia, and make bundles of linen or other materials which they meet with; or else move their hands about blindly, as if seeking to collect and bind together something; when, in fact, there is nothing within their reach. The fury of epileptics bursts forth after the attacks, rarely before, and is dangerous, blind, and in some sort, automatic. Nothing can subdue it, neither the appearance of force, nor moral influence, which succeeds so well with other furious maniacs. This fury is so formidable, and so much dreaded, that I have seen in a hospital of the south, all the epileptics chained every night to their beds, in consequence of the fear which they inspired. I am unable to determine whether the mania of epileptics, has any connection with the frequency of the attacks, or with the vertigoes. It bursts forth among those already in a state of dementia, and even among subjects who enjoy habitually the use of their reason. Dementia is that form of mental alienation, which most generally threatens epileptics.

A young man, twenty-six years of age, having become epileptic in consequence of having given himself up to the practice of onanism, was exceedingly irritable after his attacks. The slightest opposition produced fury. He had conceived a strong aversion to his parents. To these symptoms, is joined a gloomy melancholy, attended with a disposition to commit suicide. Neither tonics, cold baths, nor indeed any thing can prevent his sinking into dementia, of which he already manifests some symptoms.

A lady, now thirty-four years of age, has been epileptic from infancy. Her mind is feeble, and at the age of puberty, she became a maniac. She is married, and has one child. Some domestic troubles produced fury, and the attack lasted about a year. Since this period, that is, since the age of twenty-four years, this lady has often had delirium, and sometimes fury. The attacks of epilepsy take place during the night, and it is before the attacks that fury bursts forth. Dementia is imminent. With respect to its duration, the mental alienation of epileptics is now ephemeral, and takes place, only after the attacks, particularly mania accompanied with fury, and an inclination to suicide. Nevertheless, its duration extends from a few minutes or hours, to several days. Now it is permanent; particularly dementia. It is independent of the return of the attacks, and persists from one to another.

Whatever may be the form and duration of the mental alienation of epileptics, it takes place, sometimes at the first, or among the earliest attacks, particularly in infancy. In the case of some epileptic children, reason is not developed; they are idiots. With others, it is developed, but is speedily lost. When epilepsy appears after puberty, and especially adult age, reason yields more slowly; but each attack adds to the feebleness of the intelligence, before dementia is complete. The progress towards dementia, is in proportion to the number of years that have elapsed, since the invasion of the first attack. It is more to be feared, and is more rapid, when the attacks occur, at intervals increasing in frequency; whilst reason is preserved, when the attacks are rare, when they are not many times repeated on the same day, and when there are not vertigoes. This tendency to dementia is more directly allied to the frequency of the vertigoes, than to that of the epileptic attacks. Vertigoes have a more active and energetic effect upon the brain, than what is called, *le grand mal*, or the complete attack. Vertigoes destroy the intelligence, both more speedily, and with more certainty than the attacks, although they may have scarcely an appreciable duration. There are indeed, individuals who have vertigoes, in presence of persons who can no more perceive them, than if they did not occur. When epilepsy ceases, or when it is suspended for a longer or shorter period of time, (and it ceases sometimes for years), or the interval between the attacks increases, though the malady does not cease, the

understanding is progressively recovered, and the dispositions of the subjects of it are ameliorated. They are less irritable, more mild, more sociable; but I have never seen one, who did not preserve a very marked physical and moral susceptibility. How happens it that vertigoes, whose duration is so brief, and where convulsions are scarcely perceptible, produce a more fatal effect upon the brain, and destroy more promptly the understanding, than complete attacks of epilepsy, whose convulsions are more violent and lasting? How happens it that hysterical convulsions, which are so intense, and which persist during many hours and even days, do not produce dementia, like epileptic seizures, and more especially vertigoes? Does not this last observation serve to confirm the opinion of those, who pretend that both hysteria and epilepsy, have their primitive seat in the brain? Such is the general course of this terrible disease.

Amidst so many, and such varied symptoms, by what signs shall we recognize epilepsy? The confusion, and fall at the commencement, or during the attack, takes place in syncope, asphyxia, and apoplexy. The convulsions, which are now general, now partial, now extremely violent, and now scarcely appreciable, are not constant, and appertain to other neuroses. The same is true of the frothing at the mouth, which exists sometimes in apoplexy, asphyxia and hysteria. The involuntary emission of urine and semen, is not a symptom confined to epilepsy. The strong contraction of the thumb, and its occlusion, are not constant. *The pathognomonic character of epilepsy, consists in convulsions, the entire suspension of sensibility, and loss of consciousness.* Epilepsy is therefore a convulsive or clonic malady, with loss of consciousness. Epilepsy differs from apoplexy. In the latter, respiration is stertorous, there are few if any convulsions, and the pulse is scarcely altered. It is usually fatal on the second or third attack. We cannot confound epilepsy with syncope, from which it is sufficiently distinguished, by the flushed countenance, the freedom of the pulse, the relaxation of the muscles, and the recollection of the state which he escapes who has had syncope.

Hysteria has been often mistaken for epilepsy, and reciprocally. Hysteria however, only appears at puberty or subsequently. The attack does not burst forth suddenly, and is preceded or accompanied by globus hystericus, or constriction of the throat. In epilepsy, the convulsions are concentrated, and seem to tend towards the axis of the trunk, and are more violent on one side of the body than the other, or in one member than in the others. In hysteria the convulsions are, so to speak, expansive. The members extend and project themselves as far as possible, are more fully developed, and the convulsions are more uniform. The features also, are less altered, and the countenance is less hideous and injected. In hysteria the abdomen is distended, there are borborygmi, the patient does not lose his consciousness, nor does he fall into a comatose state after convulsions, but preserves a recollection of what he has just experienced, and there is less prostration after the attack. In the intervals, some hysterical symptom always betrays the nature of the malady. Hysteria, even when prolonged, never destroys the intellectual faculties. The causes of epilepsy are general or special, remote or proximate. Certain authors assure us that epilepsy is endemic in some countries. Is it not most frequent in mountainous countries? Hippocrates classes it among the maladies of spring. Is epilepsy contagious? Yes, by the fright which an attack inspires. Powerful moral impressions, received by the mother during pregnancy, communicate it to the fœtus, and those which the nurse receives, by changing the quality of the milk, have also caused epilepsy. Are children who have been conceived during the menstrual period, more exposed, on this account, to the malady?

Epilepsy attacks persons of every age. However, it is so common in infancy, and so rare at adult age, particularly in advanced life, that it has been call-

ed, *mal des enfans.* The readiness with which it is contracted, is in an inverse ratio to the age; but we must add, that if this malady is more common at the earlier periods of life, it is also more easily cured. The extreme susceptibility of the nervous system, the presence of meconium, intestinal worms, the labor of dentition, the bad quality of the milk of nurses who give themselves up to errors of regimen or to their passions, are also circumstances, which more particularly expose children to epilepsy. Falls, and ligatures with which the bodies or heads of infants have been too tightly compressed, have often caused this malady.

Women and children, being more feeble, susceptible and impressible than men, are more subject to epileptic seizures. This predisposition with respect to sex, is not perceivable from birth until the age of seven years. At this period, the character of either sex is delineated, becomes marked, and distinguishes itself; and it is then, that the number of epileptic women predominates. By comparing the number of epileptics at the Salpêtrière, with the men suffering from the same malady, who have been admitted at the Bicêtre, we find the number of epileptic women the greater by one third. There are at the Bicêtre, one hundred and sixty-two epileptics, and three hundred eighty-nine at the Salpêtrière. Melancholic temperaments, enfeebled, scrofulous, and cachectic constitutions, predispose to epilepsy, as well as scurvy, rachitis and syphilis. Errors of regimen, onanism, insolation, blows and falls upon the head, the abuse of alcoholic drinks and poisons, are the exciting causes of epilepsy.

M. C., a native of Boston, aged nineteen years, made a voyage to France. Whilst sailing under the line, he lays down upon the deck and falls asleep. Shortly after, he is awoke by a dreadful headache, and an inflammation of the face and scalp. The whole head becomes enormously swollen, the patient has delirium, and they believe him lost. However, he is several times bled copiously, the inflammation diminishes, and ceases on the ninth day: but immediately after, epileptic attacks appear. The young patient is put on shore at L'Orient, where he is treated for six months; after which, he is sent to Paris, and committed to my care. The following is the condition in which I first saw him. In stature, he is of middle size, his hair is light colored, his eyes blue and very lively, physiognomy mobile, and his habit moderately full. There is an habitual cephalalgia, and obstinate constipation. The epileptic attacks recur every seven or eight days. They commence with a maniacal state. The patient suddenly begins to walk his chamber, soon after he leaps about, and overturns whatever comes in his way. He throws himself with a kind of fury upon those that surround him, and after a few moments' struggle, utters a cry. Convulsions of the face, eyes and limbs, together with loss of consciousness, complete the attack, which lasts six or seven minutes, and which is followed by a comatose state, of half an hour's duration, from which the patient comes forth, with his full measure of intelligence, and a very acute pain in the head. All the remedies advised as a cure for epilepsy, had failed at L'Orient. Having reference to the cephalalgia, which was frequently renewed during the course of the day, and to the obstinate constipation, which always announced a coming attack, after having prescribed an appropriate alimentary regimen, and abundant exercise, I put the patient upon the use of pills, prepared with the Ext. Colocynth, Asafœtida, and Calomel. At the same time, the young patient exposes his head occasionally to the flow of cold water from the spout of a pump. This impression of cold, repeated many times a day, by diminishing the cephalalgia, renders the attacks at first less violent, and terminates them in the course of three months, by removing both the headache and the attacks. This young man spent some months after this period at Paris, and finally, took passage for Boston, where he arrived in very good health, and from whence I have learned that he continued well.

The metastasis of a chronic cutaneous eruption, the suppression of an ulcer, the cessation of an habitual evacuation, are also causes of epilepsy. Military physicians have had occasion to observe, that the suppression of transpiration, sometimes renders soldiers epileptic. A woman seventy years of age, says Zacutus, had, for eighteen years, an ulcer upon the wing of the nose. A charlatan cures it by an external application. Twenty-four hours after this was effected, she had a first attack of epilepsy, and several afterwards, until two issues were established upon the legs. A man thirty years of age, receives a blow upon the head. A year after, the wound heals, and epilepsy bursts forth. The wound is opened again with the cautery, and the epilepsy ceases. An imprudent surgeon induces cicatrization; the attacks are renewed, and again cease on a new application of the caustic.

Doctor Maisonneuve* speaks of a young man, nineteen years of age, who, at the age of eight years, having washed his head repeatedly with cold water, in order to cure tinea capitis, succeeded in removing it. Some days after, he was seized with epilepsy. The attacks were least frequent during the summer. Cartheuser had remarked, that the improper practice of repelling tinea capitis with cold lotions, which was established in Sweden, had rendered epilepsy frequent in that country. Epilepsy is caused by syphilis. Omobon, Pison and Scardona, relate examples of it. Cullerier published in the *General Journal of Medicine*, (t. xiv, p. 271), two cases of epilepsy, caused by syphilis, and cured by an anti-venereal treatment. In these two cases, and in a third, related by M. Maisonneuve, the intervals between the attacks were marked by sufferings, which betrayed the presence of an ever-acting morbid cause. Tissot assures us, that epilepsy has been caused by the sudden suppression of the salivation, produced by the use of mercury. Hoffmann speaks of mercury, as capable of causing epilepsy among feeble persons. M. Landré-Beauvais has often noticed it, as a result of the mercurial treatment. Epilepsy is symptomatic and transient, among children suffering from variola, rubeola and scarlatina. It occurs, when these eruptions do not appear at a proper time, or are suddenly suppressed. Accoucheurs have regarded as epileptic, the convulsions which complicate the labor of confinement.

Violent moral commotions, the violent passions, such as chagrin, anger, and above all, fear, are the most frequent causes of epilepsy. This malady is caused, also, by strong mental conflicts, associated with an improper regimen. The sight of an epileptic seizure, and the habit of feigning epilepsy, have provoked this malady. A mason, twenty-one years of age, strong and robust, is frightened during a dream, and becomes epileptic. A servant untying a leathern string, tied in three knots, imagines that these knots are the work of a witch. She is frightened, and is taken with an attack of epilepsy. A woman is frightened by an insane person, and becomes epileptic. A girl, nine years of age, amuses herself with looking at the sun. After some minutes, she believes that she sees in the midst of it, a huge black head. She is frightened, and on the same evening, whilst relating to her mother what she has seen, is seized with a first attack. The same physical and moral phenomena which have induced the first attack of epilepsy, become the cause of succeeding ones, although they may act with less intensity. A woman meets with a severe mortification, and becomes epileptic in consequence of it. Afterwards, the slightest chagrin produces an attack.

A child is frightened by a dog, and becomes epileptic. He afterwards has an attack every time he hears the barking of a dog. Another becomes epileptic after a fit of anger. The slightest contradiction, afterwards produces an attack. A little girl ten years old, is at play with her companions, who tickle the soles of her feet. She becomes epileptic. An attack occurs every

* Researches and Observations on Epilepsy, Paris, 1803, in 8vo.

time they threaten to tickle her. Impressions made upon the senses, an unexpected noise, certain colors or odors, sometimes produce attacks. The heat of an apartment, the movement of a large assemblage of persons, the slightest error of regimen, atmospheric vicissitudes, watchings, etc.; in a word, whatever may have provoked the first attack, may become the cause of succeeding ones. A soldier rushes to the assault, a bomb bursts near him, and he is seized with epilepsy, from which he is restored, in the space of a year.

Twenty years after, the sight of the same ramparts, produces an attack. From the facility with which the attacks are reproduced from the slightest exciting causes, it seems proper to infer, that there remains in the organism after the first attack, as well as in the nervous system, a special disposition, which, from the least cause, is set in action, and occasions new attacks. This disposition, which Tissot denominates *proégumène*, merits the greatest attention in the prophylactic treatment, but is no more easy to explain, than the periodicity of epilepsy. We no more find the traces of it in the organism, than we find in the organs, lesions, proper to acquaint us with the seat of epilepsy.

After having pointed out the causes of epilepsy, I will indicate the organs upon which they seem to act primitively, in order to produce this malady. At one time, they exercise their influence upon some organ, more or less remote from the brain, and produce sympathetic epilepsy; at another, they act directly upon the brain, to produce its idiopathic form. In sympathetic epilepsy, the causes act primarily upon the organs of nutritive life, or rather upon those of the life of relation. Is the digestive apparatus the seat of epilepsy; the attacks burst forth when there exists an active gastric irritation, or when there is accumulated in the stomach or intestines, particularly among children, mucous matters, acid or otherwise; or when there has been introduced into this viscus, irritating or deleterious substances. These patients experience pains in the stomach, and tension in the epigastric region, with all the signs of gastric embarrassment. They are also fastidious. A little before the attacks, they have fainting turns, pains about the heart, nausea and vomitings, which are renewed during the attack. When epilepsy is caused by worms, the patients offer all the signs which announce their presence. That epilepsy which, I shall call intestinal, is announced by certain signs. Children who, without a fall or fright, become epileptic; who, at the same time, have a pale countenance, swollen cheeks, the eyes dull, and pupils dilated, the dejections greyish, abdomen voluminous, the gait dull and lifeless, and whose attacks are announced by borborygmi, leave no doubt as to the true seat of the evil. When the liver is primarily affected, respiration is interrupted, the diaphragm is painfully moved, the abdominal muscles are convulsively exercised, the patient loses his consciousness, and some moments after, eructations and borborygmi take place. The jaundice, which appears before, or after the attack, slowly disappears; the patient complains of a pain in the region of the liver, and vomits yellow matters. Hippocrates has referred to the bile as a cause of epilepsy: Fabricius has attributed it to biliary concretions.

It was only after numerous observations, that Hippocrates, and all who have succeeded him, regarded sanguine plethora, as one of the causes of epilepsy, especially in youth. The sanguine temperament, the approach of puberty, the delay or suppression of the menses, the cessation of some habitual hemorrhage, such as bleeding at the nose, or hemorrhoids; whatever can give the blood a tendency to the head, insolation, violent exercises, the abuse of alcoholic drinks, are circumstances that provoke *sanguine* or plethoric epilepsy. The patient suddenly loses his consciousness, the countenance becomes tumid, is very red and covered with perspiration; the eyes gleam, the respiration is blowing, the convulsions are not very violent, and last but for a short time. After the attack, the patient passes hours, and sometimes days in a

comatose statef, rom which he recovers but slowly, and to which succeeds delirium, and sometimes fury or paralysis of some member. The attacks are less frequent than in the other varieties, recurring, ordinarily, but once a month. In the interval, between one attack and another, the patients have vertigoes, and torpor of the faculties. On opening the bodies, we find the vessels of the head dilated, and gorged with blood, and the cerebral substance strongly injected.

The suppression of the menses more frequently produces epilepsy, than that of hemorrhoids; because the menses are a physiological phenomenon, whilst hemorrhoids are an indication of deranged health. The organs of reproduction are also the seat upon which the epileptic cause primarily acts, and from whence, as by irradiation, depart the first phenomena of the attack. This variety which we may call *genital*, is most frequent among women, and differs, as we have already said, from hysteria. There is so strong an analogy between a slight epileptic attack, and the spasmodic orgasm which accompanies the act of reproduction, that the ancients have defined coition to be *epilepsia brevis*. This act is sometimes followed by epilepsy. Sauvages speaks of a person, in whose case, coition was always followed by an attack. G. Cole cites the example of a woman, who, three days after her marriage, became epileptic. Onanism predisposes to this terrible malady, and becomes the exciting cause of it, even in childhood. Zimmermann knew a young man who had an attack whenever he committed the act of onanism. A young man, from twelve to thirteen years of age, gave himself up to masturbation. Although strong and robust, he becomes extremely susceptible, and at the age of fifteen years, is seized with an attack of epilepsy. The attacks coincide with the first quarter and full of the moon, and burst forth suddenly. The patient is prostrated and utters a cry, convulsions are general; the eyes, open and fixed, are injected, and the pupils are very much dilated. After the attack, which lasts from three to four minutes, the patient remains very much fatigued during the whole day. Vertigoes are rare between the attacks. He is habitually extremely susceptible, and is mortified and grieved on the slightest cause. Tonics, peruvian bark, valerian, river baths, swimming and corporeal exercise, together with a very active life, contribute after six months, to diminish the frequency of his attacks. After the lapse of a year, they are no longer renewed, and the patient is regarded as cured. The pleasure of again seeing his mother, from whom he had been separated for two years, recalled the attacks, but they were more mild. At length, after six months more of the same treatment, he was restored to perfect health, since which period he has been engaged in commerce, and traveled much. His health was invigorated by it. He married at twenty-seven years of age, and is now remarkably well. I analyze only this case, which we may say in passing, proves better than any reasoning, the efficacy of regimen and corporeal exercises, in triumphing over a malady, at once so grave and rebellious. Continence has sometimes produced epilepsy; but excess in this respect is less to be feared than the opposite abuse. With respect to the marriage relation, I owe to the kindness of Doctor Hébréard, physician at the Bicêtre, the following note: Of one hundred and sixty-two epileptic men, residing at the Bicêtre, one hundred and nineteen are single, thirty-three are married, seven are widowers, and one is divorced.

The delay, suppression and derangement of the menses, pregnancy, and the labor of confinement, have caused epilepsy. M. Maisonneuve speaks of a young woman, twenty-two years of age, who became epileptic, in consequence of the derangement of the menses, and was cured by their reëstablishment. Another young woman, twenty-three years of age, had attacks at each menstrual period, except when the discharge was abundant. The same author cites the example of a widow, thirty-one years of age, whose turns

were suppressed by a strong impression, and who became epileptic. Fernel and Schenckius, have seen women, whose attacks were renewed only during the period of pregnancy. Horstius speaks of a woman thirty-two years of age, whose menses were scanty, and who became epileptic. The attacks recurred every fifteen days. Having married nine months after, she became pregnant and was cured. I have seen some epileptics become pregnant, without having remarked the least modification in the intensity or frequency of the attacks. Lamotte speaks of a woman, who had, in eight pregnancies, five daughters and three sons. She had several attacks of epilepsy, every time she was pregnant with a son, but never during the pregnancies with her daughters. Mauriceau has seen epilepsy take place after confinement.

If epilepsy has its seat in the digestive apparatus, in the circulatory system, or in the organs of reproduction, there are causes which act primarily upon organs placed at the surface. I will sum up, what has been said on this point. Fernel has seen the precursory symptoms, and the first symptoms of the attack, experienced at the crown of the head, and renewed, every time that the head was pressed. Doctor Vigné, a distinguished physician of Rouen, was consulted by a young man, eighteen years of age, who had become epileptic in consequence of a psoric affection. The patient experienced an icy coldness at the middle of the forehead, by which he was forewarned of an attack. For three years, Doct. Vigné applied himself to recall the eruption to the surface. He succeeded, and the patient was restored. Brunner effected a cure, by applying a moxa to the neck, at the point where the first symptoms were experienced. Fabrice met with the same success, by extracting a glass ball, whose introduction into the ear had caused epilepsy. Donat had charge of a nun, who experienced at the commencement of the attacks, a pain in the right breast, from whence the *aura* ascended to the brain. If the breast ulcerated, the attack was prevented. Hollier says, that in the case of one young man, the attack began at the shoulder, the arm was seized with trembling, the jaws were locked, and the attack took place. In another case, numbness of the right hand was the first symptom, the three first fingers were firmly contracted, the arm also was twisted, the body bent, and the patient fell. The attack of another, began in the little finger of the left hand. Tissot gives the example of a man who prevented an attack, by applying to the arm a tourniquet, which he tightened, so soon as he experienced pain in the left hand. M. Maisonneuve knew a man, in whose case the attack made its irruption, by convulsions of the arm and eyelids of the right side. If at the commencement of these convulsions, the arm was violently pulled, the attack was prevented. The effect was the same, if the patient ran. This circumstance recalls to mind another patient, who prevented the attacks by throwing the head back, as far as possible. Professor Alibert relates, that an epileptic was accustomed to lessen the gravity of the attacks, and preserve his consciousness, by causing a gun to be fired near him several times, on the day of the attack.

In other cases, the attack commences in the leg, from whence there arises a vapor, like a cold wind, along the thigh, the back and the neck, to the head, when the attack bursts forth; or rather the attack announces itself by a pain in the top of the foot, from whence arises a cold current of air towards the head. A man who has an ulcer on the leg, causes it to cicatrize. Epilepsy follows; and each attack begins with a cold wind, which proceeds from the cicatrix. A ligature above the knees, checks the attack. A lady, who had employed many remedies, was cured by the amputation of the first phalanx of the great toe, from whence the epileptic *aura* proceeded.

A child of eleven years of age, had suffered from two or three attacks a week, from the age of two years. Each was announced by a feeling of uneasiness and cold, proceeding from the right side. Doctor Carron discovered

on the thumb of an epileptic person, a small indolent tumor He made an incision into it, and removed small hard bodies, of the size of a millet seed, of a sebaceous nature. The child was cured. Doctor Pontier cured an epileptic by cauterizing the saphena nerve of either leg. These two last cases are found in the *General Journal of Medicine of Paris*, tom. xiii, p. 242, and tom. xvi, p. 261.

We must therefore, discover the causes of epilepsy, which act, at first, upon the internal organs, or those situated externally, before exercising their action upon the brain. However inexplicable may be these phenomena, however few the relations which subsist between these local impressions, and a complete attack of epilepsy, it cannot be denied that the first cause of the evil acts primarily elsewhere than upon the brain. Willis, Pison and Demoore, pretend that epilepsy ever has its primitive seat in the brain.

Is not the contrary demonstrated by the cases of sympathetic epilepsy collected by all authors? Is it not established by the cures that take place after the evacuation of the meconium, of the mucous, acrid, yellow and black matters; of worms, and biliary concretions, in gastric epilepsy? The cures which take place after the first menstrual discharge, after the reëstablishment of the menses, after marriage, and after pregnancy in uterine epilepsies; the cure by blood-letting, and sanguine evacuations in plethoric epilepsies; the cure, by the extraction of foreign bodies, by cauterization and amputation; by the reëstablishment of an ulcer; the averting of the attacks, by the ligature of the member from whence the epileptic *aura* proceeds, and by the extension of the limbs; are not these, numerous and incontestable proofs, that epilepsy has not always its primitive seat in the brain, or its first point of departure from it?

Idiopathic epilepsy commences almost with life, it has characters peculiar to it, and is the despair of physicians. The first invasion takes place in earliest infancy, and its attacks are, at first, incomplete. They occur without precursory signs, the convulsions are slight and most marked in the countenance. Their duration is short, and their return irregular, but at brief intervals. Sometimes the attacks cease for a long time, to appear again after many years. According to Hippocrates, they disappear at puberty. They may however persist even to old age, and do not seem to shorten life. The cessation of the menses, now augments, and now diminishes, the frequency and gravity of the attacks.

Hereditary predisposition, strong impressions made upon the mind of the mother during pregnancy, epileptic attacks during confinement, and vivid moral commotions on the part of the nurse, are the most common predisposing causes in idiopathic epilepsy, although denied by some authors. Tissot, in his "*Treatise on Epilepsy*," at first admits an hereditary influence, but afterwards, rejects it. Doussin Dubreuil, decides against hereditary influence. Other observers believe that epilepsy can be transmitted hereditarily, and cite facts in support of their opinion. Saillant,* Maisonneuve, and Hoffmann, cite numerous examples, as interesting as conclusive, in favor of the hereditary nature of epilepsy. From the examples which I have gathered from our epileptic women at the Salpêtrière, epilepsy is more frequently transmitted by the father than the mother, while the contrary is true with respect to mania. When the eyes of children are convulsive, when they have tumors upon the neck, and a shrill voice; when they are affected with a dry and obstinate cough; when, on becoming larger, they experience abdominal pains, unattended with diarrhœa; when there supervene swellings of the testes; when one hand becomes emaciated, an arm impotent, or when the legs are weak, without an assignable cause; when children are seized with fear without cause; when they

* Memoirs of the Royal Society of Medicine, t. iii, p. 305, and t. v, p. 89.

cry aloud, weep, yawn, and continually rub the forehead; when their sleep is interrupted by reveries; if they have convulsions, we ought to suspect the existence of epilepsy, especially if the father and mother are affected with the same malady. If convulsions supervene at a more advanced age, these commemorative signs aid us in recognizing essential epilepsy. They will enable us to appreciate the influence of symptoms, which we regard as the proximate cause of epilepsy; such as gastric embarrassment, worms, suppression of the menses, etc. Are not these disorders, the effect of preëxisting epilepsy, or that of the circumstances, which have favored the development of the malady? If so, what opinion ought we to entertain respecting medicines, proper to evacuate the bowels, reëstablish the menstrual flow, and expel worms? Hébréard* proves, that the expulsion of worms is not sufficient to remove epilepsy; their presence often being only a complication. Medicines have been increased in quantity, and the attacks have increased in frequency, because we did not reach the true source of the evil.

To these causes of essential epilepsy, a great number have been added. We remarked above, that sanguine plethora has been admitted by all authors. Hippocrates admits the superabundance of *phlegm*, as one of the causes of idiopathic epilepsy. Moral affections, by acting upon the brain, produce essential epilepsy. That which is caused by anger, is less permanent. Fright and chagrin make more profound and powerful impressions, the effects of which are more difficult to cure. We place also, among the causes of idiopathic epilepsy, vices of conformation in the cranium, and lesions of the meninges and brain. A rapid analysis of what has been observed at the post-mortem examinations of those who were afflicted with epilepsy, will be the means of determining, if it be possible to do so, the seat of idiopathic or essential epilepsy.

Leduc remarked, that the heads of epileptics are very large, the bones of the cranium very thick, and the suturès effaced. Lorry has confirmed this observation. Bontius found the cranium deformed, and Morgagni observed the same in a great number of subjects. The celebrated Dumas measured the facial angle of many epileptics, and concludes from his researches, that children are exposed to epilepsy, in proportion as their facial angle approaches seventy degrees. Bontius found in one case, the occipital bone nine lines in thickness, and Zacchias found the internal table of the same bone, destroyed by caries. Bontius saw an infant of six weeks, who was rendered epileptic by the pressure of the folds of its cap, and who was cured by removing this covering. The same author relates the case of a young man who, having received in infancy blows upon the head, became epileptic. Bonet cites similar facts. We have often met with osseous concretions, developed upon the falciform process of the dura-mater. These concretions are now round, now lengthened and sharp. In making the post-mortem examination of an epileptic, twenty-three years of age, who died during an attack, I found adhering to the internal face of the dura-mater, an ovoid, osseous tumor, eight lines in diameter, depressing the superior convolutions of the brain.

Are not the various effusions observed, between the meninges and the cranium, and in the arachnoid cavity, rather the effects, than the cause of the malady? We have often found the vessels of the meninges dilated, engorged, and varicose, containing fibrous and osseous concretions. What inference are we to draw from these alterations of the brain? Morgagni says, that in the case of a woman, epileptic for two years, the anterior third of the left lobe of the brain, very much depressed, was reduced to an extreme softness, and in that of a young man, the bed of the optic nerve of the right side resembled brownish colored pap. The brain of eight epileptics, appeared to

* Medical Library.

Greding* to be softened. Morgagni, Greding, Meckel and Boerhaäve, found the brain of epileptics hard, and even callous. The size of the ventricles of the brain, the presence of a fluid more or less abundant in them, and the serous cysts, developed in the tissue of the choroid plexuses, offer varieties without number, yet furnish no positive data. There have been found, within the cranium of persons who have died of epilepsy, scirrus, tuberculous, fibrous and osseous tumors, developed in the ventricles, and in the substance even, of the brain.

Bauhin and Borrichius, have seen abscesses in the white substance. Bartholin removed a portion of a sword from the cavity of the brain. Didier extracted a musket ball from the anterior part of this organ. The pineal gland so often contains osseous concretions, that this alteration proves nothing. Baillie and Sœmmerring, found this gland very hard, while Greding found it soft in twenty-five cases of epilepsy. He also assures us, that among twenty epileptics, ten had the pineal gland surrounded with serum. The pituitary body has been the special object of the researches of Wenzel. This author has pointed out many alterations in the osseous portion which forms the sella turcica, and the apophyses which surmount it. At one time, there are defects of conformation, at another, caries. Among twenty epileptics, Wenzel found in seven cases, the pituitary body enlarged; in ten, he found in its interior, a yellow, solid, pulverulent matter; in five, instead of this solid substance, there was a thick, viscous fluid. This body often presented to him traces of inflammation, when there was no alteration of the brain or its meninges. Wenzel indeed, constantly observed some alteration in the pineal gland; but, asks this writer, are these lesions, the cause or effect of epilepsy?

Neither the alterations of the cranium, nor the lesions of the intra-cranial organs, teach us what is the seat, or what are the organic lesions, of which this malady is the expression. Authors have neglected to mention, in their autopsies, the state of the spinal marrow and its membranes. Assisted by M. Amussat, then a pupil at the Salpêtrière, and who now stands so high in public estimation, I endeavored to repair this omission. In order to lay open and remove the marrow, M. Amussat invented the instrument called the *rachitome*, which enables us to ascertain the condition of the spinal marrow, in fatal cases of epilepsy. In the case of twelve epileptic women, ten of whom died between the first of February and the first of June following, we found the meninges injected in one case, and in two of a greyish aspect. In nine cases, there were concretions, more or less numerous, disseminated throughout the whole extent of the external face of the arachnoid covering of the spinal marrow. These concretions, which were of a lenticular form, were from one to three lines in diameter, and one line in thickness. Most were cartilaginous, the remainder, osseous. We found, in four cases, the substance of the rachidian prolongation, altered and softened; particularly the lumbar portion, and the arachnoid membrane, contained, in one case, a great number of hydatids. Thus, ten examinations of epileptics, indiscriminately made, presented in nine instances, lesions of the medulla spinalis, or its membranes. M. Mitivié, a pupil at the "Children's Hospital," found the same concretions, in two children who died epileptic. Who might not be tempted to conclude, that the organs contained in the vertebral canal, were the seat of epilepsy, since twelve *post-mortem* examinations of those who died epileptic had presented some lesion of these parts?

A woman, fifty-three years of age, is frightened. She has convulsions, and remains epileptic. The attacks return every second or third day, and are

* Ludwig. Adversaria Medico-Practica. Lipsiæ, 1769—1772, 3 vol. in 8vo. It is in this collection that J. C. Greding, has published his numerous observations on the employment of different medicines in epilepsy.

very violent. For some months, the attacks become more and more frequent. She dies at the age of fifty-six, after an attack which left her for five days in a comatose state. *Post-mortem examination.*—We found hydatids of various sizes, collected about the medulla oblongata, from whence they are propagated, in great numbers, to the coxal extremity of the spinal canal, and contained in the sac, formed by the arachnoid membrane. There is softening of the lumbar portion of the medullary substance. The pituitary body, contains a cyst, filled with a reddish brown fluid.

A child has had convulsions, from the time of its first dentition, which, at length, degenerate into epileptic attacks. At four years of age, they become more frequent. At the age of five years and a half, he has four or five attacks daily, and becomes paralytic; dying at the age of six and a half years. At the post-mortem examination, the arachnoid membrane of the medulla spinalis was found to be injected. There was softening of the medullary substance near the sixth and twelfth dorsal vertebræ. The softened substance appeared slightly yellow.

Musel, in dissecting two epileptics, found the spinal vessels varicose, and engorged with blood. Bonet has seen the spinal canal full of serum. From all these researches, particularly from those of Bonet, Morgagni, Baillie, Greding, Meckel and Wenzel, what shall we conclude? Nothing. Wepfer and Lorry have drawn this sad conclusion. We confess frankly, that pathological anatomy, has up to this period, shed little light upon the immediate seat of epilepsy. However, we must not be discouraged. Nature will not always prove rebellious against the efforts of her investigators.

What shall I say of the numberless reveries that have been put forth, respecting the immediate cause of epilepsy? The ancients attributed it to the influence of the moon, to the vengeance of the celestials, and to enchantments. Have the moderns succeeded better with their systems? Where is the substance that produces this nervous irritation? Who has beheld the animal spirits? Who has measured the force of their elasticity? They have attributed epilepsy to the *Archeus*, to a tumultuous and confused movement of the vital principle, or rational soul. Hoffmann, attributes it to the derangement of the course of the humors, which prevents the distribution of their spiritual part. Some are of the opinion, that the contraction of the dura-mater and envelopes of the brain and nerves, causes epilepsy. It is unnecessary to regard these reveries of the imagination. Let us pass to the diagnosis. From the analysis of the symptoms which characterize epilepsy, from the knowledge of the causes that produce it, from the lesion of the organs upon which these causes are supposed primarily to act, we may establish the following varieties. We attach moreover, to this classification no other importance than that of enabling us to present within a small compass, the therapeutic indications.

Epilepsy is divided into essential, sympathetic, and symptomatic. Essential or idiopathic epilepsy, has its seat in the brain or its dependencies. It may be divided into three varieties.

1. Idiopathic epilepsy, produced by external causes, such as too great a degree of compression upon the cranium, contusions, fractures, insolation.

2. Idiopathic epilepsy, which depends upon a defect in the structure of the cranium, or upon a lesion of the meninges, or the brain; upon serous or sanguine effusions into the cranial cavity.

3. Idiopathic epilepsy, which we may call nervous, is produced by moral affections, either on the part of the mother or nurse, or on that of the patient himself. Among these moral causes, anger, fear and imitation, are most to be dreaded.

Sympathetic epilepsy presents five varieties, clearly defined.

1. Sympathetic epilepsy, whose seat is in the digestive apparatus. It is caused by the meconium, by matters accumulated in the stomach or intes-

tines, by intestinal worms, by the indigestion of food, or substances of an irritating nature.

2. Sympathetic angiotenic epilepsy, which has its seat in the sanguine system. *Epilepsia plethorica* of Bonet; *Epilepsia polyposa* of F. Hoffmann. The suppression of the menses, of hemorrhoids, and of habitual evacuations, as well as errors of regimen and abuse of liquors, provoke it.

3. Sympathetic epilepsy, which has its seat in the lymphatic system; *epilepsia humoralis, metastatica*, of authors; *epilepsia cachectica*, of F. Hoffmann; *epilepsia serosa*, of Charles Pison; *epilepsia scorbutica, syphilitica*, of Bonet. Pale, chlorotic, rachitic and scrofulous subjects, are predisposed to it. The retrocession of tinea capitis, psora, of an ulcer, of syphilis or the gout, produce this variety.

4. Sympathetic epilepsy, which has its seat in the organs of reproduction; *epilepsia genitalis, epilepsia uterina*, of Sennert; *epilepsia ab utero*, of Jonston. The abuse of venereal pleasures, onanism, continence, pregnancy, and confinement, are the remote or proximate causes of it.

5. Sympathetic epilepsy, which has its seat in the external organs; *epilepsia sympathica*, of authors. Every cause, whether apparent or concealed, which irritates any one of the external parts, and whose secondary effect irradiates towards the brain, produces this variety of epilepsy.

Epilepsy is symptomatic of the cutaneous phlegmasiæ, of retarded dentition, of the eruption of variola, rubeola, scarlatina, etc., or of the sudden disappearance of these eruptions. With respect to that form of epilepsy, which is simulated or feigned, it may be caused by various motives; for example, that of obtaining a thing ardently desired; as was the case with the girl who, having heard that marriage was recommended for epileptics, feigned the disease to obtain the remedy. Epilepsy is feigned, to avoid a thing which may be repugnant. Our young conscripts had recourse to this means. I knew an old officer, who had been brought before the revolutionary tribunal, who feigned an attack of epilepsy and was saved. School-children, in order to avoid attending school, have also deceived their parents; but a physician will not long be mistaken, if he be attentive.

I have spoken above of the crises of epilepsy. We must say something of the prognosis, which is not altogether so unfavorable as is generally supposed. Epilepsy is a long and dangerous malady, but is rarely fatal at its first attack. When it is hereditary and fixed, it is not cured. Sympathetic epilepsy is cured more easily than the essential form, although the latter may not always be incurable. Epilepsy rarely affects children who have sores upon the head. Sometimes epilepsy disappears for several years, to reappear, without any new appreciable cause. Those who are attacked soon after birth, are rarely cured. If not restored at puberty, they remain incurable. Those who become epileptic between the age of three, four, and ten years, are restored, if treated in time. Those who are seized with epilepsy, a little before the age of puberty, are cured when this crisis is complete. Those who become epileptic after the age of puberty, are sometimes cured, though Hippocrates may have thought otherwise. Marriage only cures genital epilepsy. It augments the other forms. A pregnant woman who becomes epileptic, runs a great risk. When the attacks increase in frequency, and acquire intensity, we ought to fear death. Death takes place, not during the horror of the convulsions, but during the period of prostration which succeeds.

Epilepsy, complicated with mental alienation, is never cured. The physician, says Hippocrates, who knows by regimen, how to change the temperament, to render it cold or warm, dry or humid, will succeed in curing epilepsy. However, there are few maladies, for which a greater number of medicaments have been proposed, or those more absurd. Some regarded only

the condition of the alimentary canal, and prescribed evacuants; others have bled; the former desired to calm the fury of the attacks, the latter endeavored to give steadiness to the inordinately impressible nerves. In fine, tonics of the most energetic kind have been prodigally employed. Unable to discover a rational treatment, they have sought for specifics, which have been multiplied without end. The best minds, disappointed by medicine the most celebrated, have regarded epilepsy as beyond the resources of medicine, and declared it incurable to the great detriment of the sick. Epileptics have become the prey of charlatans. If physicians had accorded to hygienic aids the importance which they merit, and had not preferred the exclusive use of medicines and drugs, they would have met with better success.

Before entering upon the details of treatment, I will state what I have observed with respect to this disease at the Salpêtrière, in the division of the epileptics, in whose service I was employed for ten years. I had charge of three hundred and eighty-five women, or girls, of every age passed puberty, belonging to the class of paupers. Among this number, forty-six were hysterical, and three hundred and thirty-nine epileptic. The greater part, as I remarked page 149, were more or less habitually insane. I was no better satisfied with the description that authors have given of epilepsy, and with the results of post-mortem examinations which they have published, than with the success of the medicines which they have proposed, to combat this almost always rebellious malady. I wished to submit to my own observation, the efficacy of the most varied remedies. I employed successively, sanguine evacuations and purgatives, baths of every temperature, issues, the cautery, fire, and antispasmodics, vegetable and mineral. I confined myself to hydrocyanic acid. I procured and purchased secret remedies. Every spring and autumn, I chose thirty epileptic women, with the history of whose malady I was best acquainted; its causes and symptoms. The women were prepared in advance, by repeated promises of a certain cure. I was very much assisted by the watchfulness of the pupils.

A new medicine invariably suspended the attacks with some, for fifteen days; for a month, two months, and even for three months, with others. After this period, they returned, presenting in every case the same characters that they had done in preceding years. Several of our epileptics submitted themselves to my treatment for several years; but, shall I confess it! I did not obtain a single cure. In my private practice, I was scarcely more happy. If the attacks were suspended, it was less by the action of medicines, than the effect of the confidence which determines a patient to consult a new physician. Is not this remission or suspension, generally observed by physicians who are called to treat chronic diseases, particularly those called nervous?

Ere long I perceived that epilepsy is rarely curable. It has happened that cures of hysteria have been published, which were supposed to be epilepsy. The mistake is easy, so greatly does the latter malady resemble epileptiform hysteria. Authors have also taken for a cure, the spontaneous suspension of the attacks, as well as their suspension from every new mode of medication. This error is the more readily committed, as the patients are lost sight of, by the physician, who is not consulted on the return of the attack. The following case will justify my suspicions respecting the cure of epilepsy, and put us on our guard against precipitancy in our judgment.

When I assumed the duties of a medical officer at the Salpêtrière, Doctor Landré-Beauvais, who had preceded me in charge of this department, handed me notes of those cases which he had submitted to a particular treatment. At this period, the strongest confidence was placed in the efficacy of the nitrate of silver. My colleague had made trial of it, and remitted to me the following note respecting N. *She has employed the Nitrate of Silver, for a*

long time, and has had no attack for six months. Her menses, which were suppressed, are reëstablished. Six months pass away, and N. demands a discharge from the hospital, because she has been restored for a year and is now very well. Before making out a certificate of discharge, required by the regulations of the hospital, I addressed several questions to her respecting the causes of her malady and cure. In her reply, she made the following disclosures. "Jealousy and mortification suppressed the menstrual discharge, and I was immediately seized with an attack. I was admitted into the hospital, and many remedies were employed. M. Landré-Beauvais ordered me pills of *silver*, and I took them for several weeks. Finding myself no better, I laid them aside. I said nothing about it, through fear of grieving M. Beauvais, who was very kind to us. Sometime after, a woman in the hospital gave me a very strong ptisan, in order to bring about a return of the menses. She succeeded. The attacks of epilepsy have not appeared for a year. My "periods" are regular and abundant. I no longer have attacks nor vertigoes. I am quite well, and am going to return to the house of my master." Two months after her discharge, she comes to solicit a readmission to the hospital as the attacks had reappeared. The nitrate had not cured the patient. Thus my confrère, an equally good observer and judicious practitioner, contented himself with recording in his notes; "N. has made use of the nitrate of silver, and her menses have been restored for six months, since which period she has had no attacks." He does not add, "N. is cured."

This fact among a thousand, proves how distrustful we should be, respecting the administration and effects of medicines; and with how much reserve we should proclaim the cure of a malady, especially of a malady of the nervous system. To treat epilepsy, we must not only attack the cause, but remove the disposition to a return of the attacks. We must prevent the attacks when they announce themselves by precursory signs, and avoid the accidental causes which may provoke them. The best practitioners are of the opinion that nothing is to be done during the attack, but precautions must be taken, lest the patient injure himself. If we have given some attention to the symptoms calculated to reveal the cause of epilepsy, and the organ upon which this cause primarily acts, we shall have presented to us the principles of treatment, which are suited, not to epilepsy in general, but to each species or variety in particular.

Thus, epilepsy which has its seat in the digestive system, should be treated, if there is gastric embarrassment, by emetics and purgatives, selected from among those which do not debilitate. Galen employed the oxymel of squills with the greatest success. If there is irritation, we prescribe sanguine evacuations and sedatives. The Artemesia Santonica and Calomel, are employed when worms infest the alimentary canal. The mineral waters of Balaruc, of Spa and of Pyrmont have been found useful.* The patient should avoid every thing that can surcharge the stomach, such as greasy substances, butter, and salted food. If we suspect some engorgement of the liver, whey with cream of tartar, the mineral acids, particularly the sulphuric, are recommended, as well as the Cichorium Intybus (*Succory*), Saponaria officinalis, and tepid baths These means, which the discretion of the physician must modify, should be combined with tonics, Peruvian bark, Valerian, etc.

Epilepsy, which has its seat in the sanguine system, ought to be combated on other therapeutic principles. If there is plethora, attended with cerebral congestion, general blood-letting, repeated if necessary, cups, and leeches applied to the temples or behind the ears, particularly among children, are useful. We recall suppressed sanguine evacuations, whether normal or pathological. If puberty, or the first appearance of the menses does not remove the

* See Hooper's Med. Dictionary, article Mineral Waters.

disease, it should be treated like essential epilepsy. If menstrual disorders are the effect of epilepsy, we should fear exasperating the evil by the persevering administration of emmenagogues. We shall avoid error, if, returning to earliest infancy, we discover the first indications of epilepsy, that is, convulsions, or incomplete attacks. As it respects regimen, we insist upon the means proper to moderate the activity of the circulation; to prevent its too strong impulse towards the head, and to render sanguification less active. Insolation, large assemblies in warm and imperfectly ventilated apartments, violent exercises, liquors, and the violent passions, should be avoided, and also constipation. Epilepsy, which has its seat in the lymphatic and absorbent system, and which is produced by the suppression of the transpiration, or an ulcer, the retrocession of psora, herpes or the gout, requires a treatment adapted to reëstablish these various affections. It is with this view, that it has been recommended to dwell in cow stables, in cases of epilepsy that have been produced by the suppression of the transpiration. M. Landré-Beauvais, with reference to this suggestion, directed the following experiment to be made at the hospital of the Salpêtrière. Four beds were placed in the stable, in which four cows were kept. Four young epileptics occupied this stable for several months, and were replaced by others. The result was absolutely null.

Does difference of climate and regimen, explain why this means has succeeded elsewhere, while it has been unsuccessful with us? Finally, we understand that a treatment, suited to reëstablish the transpiration, would be favorable in that form of epilepsy, which is caused by the suppression of this function. Thus, tepid baths, frictions, moderate exercise in the open air, etc., would be useful. Issues have succeeded, when we have wished to produce a derivative irritation, or have desired to replace a cutaneous affection, an ulcer, tinea capitis, or tetter. Exutories upon a large surface, ought to be continued for a long time, even after a cure has been effected. Epilepsy, which has its seat in the organs of reproduction, offers numerous considerations which ought to control our treatment. If epilepsy is produced by the constitutional effort that takes place at the age of puberty, the patient requires a good regimen and exercise; gymnastics and the cold bath, are not to be neglected. If it is suppression of the menses, or menstrual disorder which has produced epilepsy, we must reëstablish or regulate this evacuation, and if the constitution of the patient is strong, and we have reason to suppose that atony of the organs of reproduction exists, marriage may be advised. By reëstablishing an equilibrium in the distribution of the vital forces, epilepsy will cease. But we must not lose sight of the fact, that often, the suppression of the menses is not the cause of epilepsy; that the true cause acts sometimes from earliest infancy, especially in hereditary, or constitutional epilepsy, and in the case of children committed to the care of mercenary nurses or strangers. If onanism has been the cause of this frightful malady, we must have recourse to all those means which can, so to speak, renew the temperament. Bark, valerian, the martial preparations, asses' milk, a diet of white meats, and analeptics generally, are serviceable. Corporeal exercises, on horseback, by fencing, dancing, cold baths, river baths, swimming and affusions, often so useful, would be dangerous, if there existed engorgements, or suppuration in the viscera.

The different examples which we have given above, furnish to the practitioner some special indications. If the cause, which acts primarily upon an organ, is easily removed or destroyed, we eradicate it. We apply fire, caustics, setons or cupping glasses, over the part from whence the *aura epileptica* proceeds. It has been proposed even to divide the nerves. Antispasmodics and regimen, ought to second the local means. Can idiopathic epilepsy be cured, if it depend upon an organic lesion, or upon a vice of conformation? What are we to expect from medicines? The physician who is a wise obser-

ver, avoids the use of them, and confines himself to regulating the regimen, and shunning those circumstances which are calculated to produce a return of the attacks. The cautery, moxa, and the trephine have been recommended, when the recollection, and a fixed pain in the head, lead us to hope to reach the cause of the evil, or when the symptoms indicate infiltration of the brain or its meninges, by serum, or, as the ancients would say, by phlegm.

The prince of ——, epileptic from his earliest youth, would permit no one to approach him, notwithstanding the entreaties of his family. With the progress of age, the attacks became more frequent; and at fifty-seven years of age, he is taken with an attack and falls headlong into the fire. After having burned through the scalp, the fire penetrates even to the external table of the parietal bone. An abundant suppuration is established, and the wound is kept open by a portion of necrosed bone. The sick man, having become impatient, demands the service of a surgeon, who removes the bony fragment, and cicatrization advances rapidly. It is complete in the space of forty-two days. During all this period, the patient had no attack; but they immediately returned after the cure of the wound. One of them is followed by mania with fury. Two large bleedings control the delirium. At a numerous consultation, I proposed to open the wound with the actual cautery. Those composing the consultation, preferred two issues in the neck. These produced no effect. I have ever since regretted, that my advice in the case had not been regarded. Valentin cites the cases of epileptics, who have been cured, by the actual cantery applied to the head.

[As illustrative of the effect of powerful and long continued counter-irritation in the treatment of Epilepsy, I would state the following case: A. W. S., a young man, now 19 years of age, has been subject to epileptic paroxysms, gradually increasing in frequency ever since his tenth year. His first attack occurred within an hour after eating, ad libitum, of almonds and raisins. It was on an anniversary occasion, when the largest liberty is usually extended to children, and the energies of both mind and body are taxed to the utmost. Being the only member of a large family who had ever been seriously ill, this dreadful occurrence excited the liveliest sympathy. The attacks continued to recur, notwithstanding every effort that a father's tenderness and the skill of the most able physicians, could suggest. So trying to the feelings of the female members of the family were his paroxysms, and such their effect upon the mind of the patient, that he was at length placed at the Retreat at Hartford, Conn. In this Institution, during a period of nearly four years, he was submitted to every variety of treatment, both moral and medical, that offered the smallest prospect of relief, but without success. In the month of December, 1843, his attendant rose as usual at an early hour in the morning, built a fire in his stove—the pipe of which was carried up a few feet, then returned, and after being brought near the floor, by an angle conveyed into the flue—and left the room for a few moments to procure a pitcher of water. During his absence the patient arose, went to the stove, and,—feeling an unpleasant sensation in his head,—leaned forward over the pipe, to bathe it in a basin of water which stood on the other side. At that moment he was seized with a paroxysm, and fell with his abdomen directly across the heated pipe, from which it was protected only by a thin surface of cotton cloth. He was heard to fall by a person occupying the room beneath, who immediately ran to his assistance, but not before a frightful burn had taken place. A deep, suppurating wound, embracing nearly the entire surface of the abdomen, confined him to his bed for several months, reducing the system excessively, and for many weeks threatening his life. He at length however recovered, and has never had an attack, (now almost eleven months), since that connected with the injury just described. He is still cautious with respect to regimen, avoiding sources of much excitement, and confining himself mainly to farinaceous

and vegetable food. He reads however, studies, and submits himself often to influences which formerly resulted uniformly in a fit.

How long this reprieve will last,—if it be a reprieve merely,—time alone will show. Though perhaps practically of little utility—as this agent, to a similar extent will never be resorted to as a remedy—it furnishes still further evidence that the causes of epilepsy are deeply seated, and that the severest shock to the whole system, compatible with life, can alone be expected to be attended with salutary and permanent results. It may be proper to add, that this patient was bled several times during the early part of his treatment, took purgatives at brief intervals, had a seton open for many months in his neck, was put upon a rigidly abstemious diet, avoiding meats, stimulants, and indigestible food, and had recourse to gentle exercise. By one physician, with whom he spent a considerable period, the Nitrate of Silver was employed freely. After his admission at the Retreat, the seton was continued for a time, and a restricted regimen enjoined. Part of the time, exercise in the country was permitted; and at other periods, in order to avoid mental excitement, he was confined to his room. At his own urgent solicitation, he was kept in his room for three successive months, and limited to a tea-cupful of mush and milk three times a day, during the whole period. During this time, his mind was in a calm and cheerful frame, and an interval of seven weeks elapsed between the paroxysms. The records show that he took Hydrocyanic Acid for about three months—from one to three drops at a dose—thrice a day. The shower bath was administered twice a week for many months. He was put upon full doses of the Sulphate and Oxyd of Zinc, the Exts. of Strammonium and Belladonna,—took Valerian and Ammoniated Copper—his bowels being kept free, sometimes by salines, sometimes by drastics, and at others by laxatives. From none of these agents was any benefit received, and but brief and temporary amelioration of any of the symptoms. A very abstemious diet rendered the intervals between the fits longer than anything else, and also made him more pleasant. It has always been observed, that if he ate heartily, or partook of fruit, or of a variety of food, it made him worse. Medicine was suspended and renewed at intervals, but with little benefit; and at the time of his accident, no expectation of his recovery was entertained. He now takes Quiniæ Sulphat gr. 1, Morphiæ Sulphat gr. 1-8 in Camphor mixture, three times a day. Diet limited to vegetable and farinaceous food, in moderate quantity.]*

Henricus ab Heers, cites the example of a girl who, near the time of her marriage, was frightened by two men in a state of intoxication, who endeavored to violate her. Muriate of Antimony, applied to the great toe of either foot, until the bone was denuded, terminated the attacks. When our eloquent and learned Pariset, then physician at the Bicêtre, was sent to Cadiz, to investigate the yellow fever, I was charged with the service of the insane and epileptics in that hospital. I found twenty epileptics submitted to the experiments of my professional brother. Moxas, to the number of two and even three, had been burned upon the most elevated part of the head, and the ustion had penetrated even to the external table of the bones. The wounds were kept open with the greatest care. I could not furnish undeniable proof of a single cure. There was brought to the Salpêtrière, a young epileptic whose attacks began in the great toe. On the faith of authors, I believed the cure certain. The toe was cauterized to the bone. Far from having cured my young patient, the attacks were no longer announced by pain in the great toe; there was no longer an *epileptic aura;* but they were both more frequent and violent. Finally, essential epilepsy ought to call into exercise all the attention

* This patient, I have just learned, returned to his father's family a little more than a year after his last attack at the Retreat, but was seized with a fit about four days after his return.

of the practitioner. It is against this form, as it occurs among children, that we have sometimes employed with success, valerian, bark, iron, the misletoe of the oak, (Viscum album) musk, opium, camphor, assafœtida, mercury, etc. Let us examine briefly, the importance of these substances, and fix the degree of confidence which they respectively merit.

Valerian is one of the medicines, whose reputation is most generally admitted. There is no practitioner who has not congratulated himself upon the use of it. Its decoction is feeble and unpleasant to the taste. We give it in substance, in the dose of from one to two ounces a day, in powder or extract.

[The quantity of Valerian here recommended, greatly exceeds the dose usually em ployed. From one half a drachm, to a drachm three or four times a day, would generally be regarded as a full dose, and as much as could well be borne.]

The peony, (Pæonia officinalis), is worthy of no confidence. The misletoe of the oak, has been employed by those entertaining superstitious views, with more benefit. It is now abandoned. Musk, so useful in certain ataxic fevers and convulsions, has been useful, but would be injurious in plethoric epilepsy. The same is true of opium, whose employment requires much prudence, although it may have succeeded in essential epilepsy, caused by moral affections; in epilepsy sympathetic of very violent local pains, and in nocturnal epilepsy. Bark, and the leaves of the orange-tree in substance, are useful; camphor and assafœtida have had their admirers. Iron is preferable to bark, in debilitated and chlorotic cases, when it is particularly desirable to stimulate the circulation. Mercurial frictions have been proposed, to combat epilepsy consecutive to syphilis. Calomel is recommended, not to combat a particular infection, but to change the general action of organs, and to increase the activity of the functions of the lymphatic system. Thouret and Andry* assure us, that they have sometimes obtained happy effects from the application of artificial magnets. In England, they have tried the inhalation of a mixture of oxygen gas and atmospheric air. Their success has been more than uncertain. These various experiments, merit the careful attention of observers. I hesitate about saying so much respecting electricity and galvanism.

Shall we give the name of medicines to those substances, whose employment would appear incredible to those who know not to what degree of degradation man can descend, when given over to ignorance and prejudice? Will it be believed that physicians have prescribed earth worms, *swallowed fasting;* the powder of an elk's foot, the heel of a hare, the after-birth *of a first born* dried; the scrapings of a *human* skull, and the vertebræ; besides the dried brain of a man and raven? They have prescribed human blood *warm*, the little bones of the ear *of a calf*, the back bone of a lizard *stripped of its flesh by ants*, the heart and liver of a mole, of a frog, and of many other substances, more or less disgusting and absurd. Will it be believed, that in our day, it has been proposed to insert an amethyst beneath the skin of the arm or some other member, as an infallible specific? Without wishing to rank the metallic salts in this revolting enumeration, I think that they ought to be proscribed. Is their use serviceable? The perturbation which they produce in the organism, and upon which is founded the hope of cure, is too hazardous and often too serious, especially if employed by rash or unskillful hands. Thus we reject as dangerous, the salts of copper and nitrate of silver,

* A. Portal, in his work (*Observations on the Nature and Treatment of Epilepsy*, Paris, 1827, in 8 vo.), has gone largely into details, respecting the various medicines proposed for the cure of epilepsy.

how many miracles soever may be attributed to their use. We can say as much of fear, which is recommended by some rash persons. But who can calculate the effects of fear, and consequently, who would dare to make use of it as a curative agent!

It is essentially to hygienic influences, that we must have recourse in combating epilepsy. They are of indispensable application, to renew, in some sort, the constitution of the sick. By these means they will be permitted to engage in the cultivation of the soil, in exercise on horseback, and in gymnastics, dancing, swimming and fencing. Hippocrates recommends change of country. Van-Swieten has seen many epileptics, who had no attacks during their residence in the East Indies. Marin cites the example of a girl, who prevented the attacks by music. I knew one whose attacks occurred during her first sleep, and who often prevented them, by retiring at a late hour, and by yielding herself to gentle and agreeable diversions, before retiring for the night.

These latter considerations, call to mind what has been said about preventing the attacks. In sympathetic epilepsy, we sometimes prevent the attacks, by causing the patient to walk about rapidly, the moment the first symptoms manifest themselves, by extending, powerfully, the limb from whence the first sensation of an approaching attack, or the *epileptic aura* proceeds, by applying ligatures above the part primitively affected, and by removing all physical and moral causes, which provoke the return of an attack. Pinel employed the inhalation of ammonia, as soon as the epileptic experienced the first indications of a seizure. It remains for me to say a word respecting the precautions which it is proper to take, to prevent the unpleasant consequences of epilepsy. The prostration of the physical energies, requires, in general, strengthening regimen. We must dispel the false shame which grieves and discourages epileptics, and remove the prejudices which cause them to be regarded with a sort of dread. The habitual sadness in which many of them live, aggravates their condition. We should watch over their actions and conduct. Strongly inclined to the pleasures of love, they give themselves up to the practice of solitary vices, which are more injurious than the evil itself. We shall avoid the consequences of falls, by selecting habitations on a level with the ground, by providing the epileptics with attendants, who will hold them up when about to fall, and lay them down upon a bed or the ground, guarding their heads from hard substances, against which they might otherwise injure themselves during the convulsions. In their various movements, we must be careful not to restrain them, by confining the members tightly. In order to avoid cutting the tongue, or breaking the teeth, some of these patients exercise the precaution of placing a roll of linen between the teeth; and I knew one lady who never retired to bed without taking this precaution. If the attack takes place during the night, we may wad the bed, giving it the form of a box, to avoid falls. Where many epileptics are assembled together, we shall avoid many accidents, by placing them in dormitories, on a planked ground floor, and in employing very low beds. They ought not to live together in the same wards with the insane, as is practiced in most hospitals where they receive both these classes of patients. The sight of an epileptic seizure, is sufficient to render a well person epileptic. How much greater is the danger, in the cure of an insane person, often so impressible! What shall we think of the indifference with which these unfortunates, whom we meet in the public way, are permitted to wander about, who never fail to draw around them a crowd of the curious, embracing both women and children? Nevertheless, the sight of an epileptic seizure, is sufficient to produce epilepsy. These unhappy people, mutilated, often covered with blood, and always indigent, excite commiseration, and obtain charity from all beholders; and there is no doubt, that rogues have recourse to this means of obtaining money from the passers by. It is well to

point out this abuse, so much the more reprehensible, as it serves as a pretext for roguery, by compromising the health of citizens. I remarked in commencing this article, that at the onset of the attacks, epileptics are thrown either upon the back or abdomen. In the latter case, they bruise themselves and disfigure the countenance. We see some of them whose faces are marred by the cicatrices of burns which have been produced by falling into the fire. Worse results may happen. When the attacks take place during sleep at night, some epileptics turn upon the face in bed, and if not succored, when the collapse takes place, the face presses upon the bolsters or pillows, and asphyxia terminates the existence of the patient. We cannot guard with too much care, those epileptics who have nocturnal attacks, especially those who, during the convulsions, are thrown upon the face.

The case which I am about to relate, and with which I shall finish what I have to say respecting epilepsy, is calculated to give us an idea of the epileptic state. The subject is a patient who has, in all his habits of body, an impress of the malady to which he is a victim. It was obtained by M. Leuret, physician of the hospital of the Bicêtre.

"Joseph B——, now an epileptic, and deformed by the contractions of his limbs, was formerly a drummer in a regiment of the line. Like many soldiers, he became intoxicated, whenever opportunity offered. On those occasions, he was in the habit of quarreling, and it was after a quarrel which took place during a fit of intoxication, that he experienced his first attack. He does not know whether any member of his family was ever affected by this malady, or any other nervous affection. He is now forty-seven years of age, and was twenty-eight when seized with his first attack. He has therefore suffered from this malady nineteen years. Without fortune, and unable by his labor either to satisfy his necessary wants, or to secure proper care, he is admitted at the Bicêtre. For a long time, his attacks were quite slight, and permitted him to render himself serviceable in the hospital. He was employed as a glazier. Eight years after his admission, whilst laboring at his vocation in the fifth story, the cord which sustained the scaffold upon which he was sitting, broke, and the unfortunate Joseph B. fell upon the pavement, and was wounded in the head. From this moment, his attacks, which were previously very frequent, became more so, and his body was reduced to a state of general and permanent contraction. He almost always lies upon his back, his feet rigid and inflexible, the legs drawn up towards the thighs, the hands flexed upon the fore-arms, and the latter upon the arms; in a word, the members are so stiffened, especially those of the right side, as to be scarcely capable of executing any voluntary movement. Sensibility is changed in an analogous manner. The left side still feels. Touch is still exercised there in a slight degree, and it transmits, although feebly, the impression of cold or heat. On the right side, sensibility is almost gone. We touch the arm or thigh of this side, but the patient does not perceive it. We pinch him, without producing any pain. In front, upon the trunk, the line of demarkation between the two sides, is well drawn. Insensibility ceases at the *linea alba* on the abdomen, and at the median line on the chest. Posteriorly, it is along the middle of the back. The head is usually drawn back, and the muscles of his person, even when in a state of repose, (which rarely occurs), leave upon the features a convulsive expression.

He is incapable of making a regular and complete movement, and if he wishes to lay hold of any thing with his left hand, which is the better of the two, he never succeeds at the first effort, nor without fatigue. If he desires to speak, the tongue stammers; he pronounces one or two syllables, and unable to finish, seeks an equivalent for the word which his tongue refuses to articulate. This defect gives to his speech a great resemblance to that of a drunken man. Rarely are his muscles in a state of complete repose. If their

contractions are too feeble to execute certain movements of those parts which it is their office to move, by applying the hand upon any part of the surface of the body, we feel that it is agitated by a kind of vermicular movement, very analogous to what occurs in ataxic fevers, and which are called *subsultus tendinum.* If he closes his eyelids, we observe that they tremble. For more than seven years, that is, after the disappearance of the immediate symptoms caused by his fall, he has daily from three to six epileptic attacks. A little less than a minute before the attack, he is apprised of its approach *by something which takes place in his head;* utters a cry, mutters certain words, and loses his consciousness, at the same time that he experiences epileptic contractions. It is rare that saliva issues from his mouth. The attack lasts for a short time, and the patient promptly recovers his senses.

Notwithstanding the long duration of his malady (nineteen years), and the frequency of the attacks, the understanding of the patient preserves its original integrity. His words are not always intelligible; indeed, they lack much of it. His phrases are never complete, nor is the expression of his features ever in relation with what he is saying; but it is easy to see, that all this depends upon the instrument which executes his will. That sentence, which a convulsive movement does not prevent him from expressing, denotes a just thought, and a healthy judgment. With respect to his moral manifestations, he is superior to the greater part of his companions in misfortune, who are otherwise less afflicted than himself. Epilepsy changes the character, and disposes the unfortunate subject of it, to bickerings and freaks of violent anger. Joseph B., however, is very mild, taking notice of the attentions that are paid him, and when any one approaches him, he sees that he is always disposed to smile, or to utter expressions of thankfulness. The functions of nutritive life are healthfully executed; the appetite is good, alvine evacuations take place daily, and the urine is excreted as in a state of health. The pupils contract properly; and the respiration and pulse offer nothing anormal. There are doubtless, few examples of a malady as long, and of attacks as numerous and frequent, in which the intelligence has remained so sound, as in the case of Joseph B. It is the only case that I have ever met with, among more than six hundred epileptics."

[With respect to the pathology of Epilepsy, the views of our author correspond with those of the profession who have most carefully investigated the subject in this country and in Europe. We can add nothing to what has been stated respecting the Idiopathic form of this malady, and shall content ourselves with a few remarks in reference to his other division, or Sympathetic Epilepsy.

While we frankly admit that we have little confidence in the efficacy of remedies in this disease, we cannot find it in our hearts to recommend an entire disuse of them. We believe that when judiciously employed, they may aid the Vis Medicatrix in its efforts to repel those morbid influences that so seriously disturb the functions of organic life. It becomes us to study with care the pathology of every case that is presented to our notice, and to relieve, so far as practicable, every disordered action. To overcome nervous irritability, to equalize the circulation, to regulate the secretory functions, and to secure a calm and hopeful frame of mind, will clearly constitute a part, and that not an unimportant one, of our duty. Certain agents belonging to the class of Sedatives, combined with those which are known to exercise a tonic influence, may be employed, with a view to their supposed specific influence, the quantity of their respective ingredients varying, to meet the indications which are from time to time presented. The preparations of Copper and the Nitrate of Silver, are those articles of the latter class upon which reliance may be placed; and Camphor, the Extract of Belladonna, and Strammonium in some of its forms, of the former. To these, Valerian and Assafœtida may perhaps be occasionally added, with advantage. We notice these remedies, among many

that occur to us, not so much because we entertain a greater degree of confidence in them, but rather because they are at present the more popular. Every source of irritation which may originate in the use of indigestible food, from intestinal torpor, or from an inordinate amount of alimentary matter in itself proper, all mental agitation, whether from the exercise of pleasing or depressing emotions, and such corporeal exercises or occupations as are sedentary, or require for their performance a stooping posture, are to be scrupulously avoided. In a word, all the means employed should have for their ultimate purpose the restoration of every disordered function, and the preservation of the integrity of every portion of the system.]

CRITICAL TERMINATIONS OF INSANITY.

General remarks on the doctrine of crises.—No cure without a crisis.—Causes of incompleteness of crises.—The physician the minister of nature.—Remarks on relapses.—A marked remission usually during the first month.—Its cause.—Insanity terminates by resolution.—Principle of cure illustrated by cases.—Terminates by the predominance of activity in the absorbent system.—Terminates by great prostration and emaciation.—Example.—A febrile movement often serviceable.—Examples.—Hemorrhages sometimes effect a cure.—Examples.—Herpetic eruptions sometimes cure insanity.—Examples.—Furuncles sometimes critical in insanity.—Examples.—Abundant suppurations, whether spontaneous or provoked, sometimes terminate insanity.—A variety of illustrations and examples.—Influence of coition and continence.—Examples.—Pregnancy and confinement sometimes terminate insanity.—Examples.—Pregnancy and confinement, when they effect a cure, act rather as exceptions than in accordance with a general rule.—Dentition as a cause of insanity.—Examples.—Crises of insanity arranged in their order.

I SHALL not discuss all that has been said respecting crises, nor sit, a self-appointed judge, upon the respective merits of Galen and Asclepiades. It is sufficient for me to remember that the doctrine of crises is as ancient as observation in medicine; and that, divested of pythagorean notions, and the subtilties of dogmatists, it has been sanctioned by the experience of all ages. I propose to demonstrate that this doctrine is, in all respects, applicable to mental diseases. This application would be far more fruitful with respect to therapeutics, should I extend it to each order of the vesaniæ. But the crises of insanity having been imperfectly understood, or neglected by the greater part of authors, I have desired to point them out in this essay, as furnishing useful hints for the treatment of this malady.

Mental alienation, which the ancients regarded as an inspiration or punishment of the gods; which was afterwards regarded as a demoniacal possession, and which, in other times, passed for the work of magic; mental alienation, in all its forms, and varieties innumerable, differs in no respect from other diseases. Like them, it has its premonitory symptoms, which enable us to foresee it, symptoms which characterize it, a course which is proper to it, periods of increase and decline, a duration peculiar to it, and at length, the united efforts of the whole system, tending to terminate it, either by a cure, or by death. Like all maladies, insanity is sporadic or epidemic, hereditary or accidental, idiopathic or symptomatic. It is simple or complicated; continued, remittent, or intermittent; acute or chronic. Why should not insa-

nity terminate by crises? Hippocrates, and all good observers assure us, that the cure of diseases never takes place without critical phenomena. In fact, where is the physician who, having prescribed for a patient, would believe him to be effectually cured, unless he could refer, in his own mind, to crises which terminated the disease? Doubtless, there are forms of disease, in which crises are especially frequent, and easily perceived. Such are acute diseases. It is very unusual, that in grave forms of fever, and in the phlegmasiæ, we do not observe critical phenomena. Now, insanity presents the most striking analogy to these disorders. The points of resemblance are so numerous, that often, at the period of attack, the most skillful eye can scarcely distinguish them. This analogy becomes still more surprising, when we compare certain insane persons with the dying. We notice among them, almost all the signs of death described by Hippocrates;—the eyes fixed and glaring, with a look still more terrible, which seems to discover from afar, some frightful object; a sinister and mysterious air; convulsions of the hands, or carphologia, alteration of the voice, a sardonic laugh, involuntary dejections, etc. With relations so striking between insanity and those maladies which terminate most frequently by sensible crises, why should not the former itself terminate by crises?

I have always observed, that the cure of mental maladies is only deceitful or temporary, when it is not determined by some critical phenomena. Attacks of intermittent insanity terminate, almost invariably, promptly and suddenly, without enabling the physician to perceive the critical cause of the cessation of the symptoms. I say almost always; because it happens that the attacks, especially when their return is regular, terminate by crises as constant and regular, as the epoch of the return of the attacks themselves. In chronic insanity, the crises are less apparent, because the symptoms are less energetic, and more tardy, because the symptoms proceed slowly. They are more sudden and marked, in accidental and acute attacks of insanity, which seize, with violence, young, strong, and robust subjects. The crises are incomplete. Hence the reason why mental alienation is, in these cases, often chronic. When we reflect that causes the most debilitating, both physical and moral, are those which, in a great majority of cases, predispose to this malady, and provoke it; it furnishes a very satisfactory explanation, of the defective reaction, the incompleteness of the crises, and the transition of insanity to the chronic state. Those whom insanity attacks, are debilitated by excessive study and watchfulness, by the abuse of pleasures, by long continued griefs; by every variety of error in regimen, by acute disease, by habitual evacuations. If the early symptoms indicate a good degree of constitutional vigor, this energy is only apparent and deceptive, and becomes the source of many errors in treatment.

Another cause of the incompleteness of crises, and consequently of the chronic nature of insanity is, that it is a malady, in which the critical efforts are especially affected by nervous anomalies, and by the excessive sensibility of the patients; circumstances which, by interfering with the regularity of the vital movements, powerfully oppose the completeness of the crises. Nor must we lose sight of the fatal effects of the treatment employed at the commencement of insanity. Frightened by the first symptoms, they almost destroy the patient, by copious and repeated bleedings; and thus deprive nature of that vital energy, which is necessary to bring the malady to a successful termination. These agitators are ignorant of the fact, that the physician does not cure; that he is only the minister of nature, that his office is, to remove the obstacles that might otherwise turn her aside from her proper path, and to prepare the patient for the successive development of the symptoms of the disease, so that he may prove equal to the critical efforts that are to terminate it. Meanwhile, Hippocrates advises us to be watchful at the beginning of

disease; and warns us not to be frightened by the grave symptoms, which precede and accompany crises.

What shall we think of those physicians, who always wish to have a share in whatever nature does, who are armed at all points, to combat one after the other, and, as it were, hand to hand, the symptoms that occur during an attack of disease? Let them call to mind this fearful sentiment of Baglivi; *Quanto plures remediorum usus necat, quàm vis et impetus morbi.* (*De crisi et diebus criticis*). A comparison of the existing method of treating the insane, with that employed by the ancients, proves this. Desiring to abate the activity of the vital forces, they deprived the maniacs of that energy which was necessary for delirium. Hence, sudden deaths, paralysis, and dementia. Hence, temporary cures, followed immediately by relapses, when reaction permitted the development of the first symptoms. Thanks to the principles set forth by Pinel, we find at this day, a wise custom prevailing, which watches the efforts of nature, in order to second, not to prevent them.

It is also certain, that in our days, we cure a greater number of the insane, and that relapses are less frequent than formerly. We should carefully guard against confounding relapses with new attacks of insanity. All physicians know, that individuals who have suffered from intermittent fevers, from inflammations of the brain, of the lungs, stomach, etc., are, more than others, exposed to contract again these same affections; since an organ, that has once been affected, is, from this circumstance, disposed, more than another, to be affected anew. We do not give the name of relapse, to the returns of other diseases, and why should we to a new attack of insanity? I do not pretend to deny, that those who have been insane, are exposed to relapses. They must be more exposed thereto than other patients, because as I have already remarked, the crises of insanity are often incomplete, and convalescents, for a very considerable period, are exceedingly susceptible. Physicians who have had charge of the insane have doubtless remarked, how many persons who are cured, commit imprudences, and are not careful to avoid the causes, which first occasioned their illness. But I am wandering from my subject, and return to the crises of mental alienation.

I think that I have demonstrated by analogy, that mental alienation terminates by crises. Let us see what observation and experience teach. I could relate facts, found in the writings of Hippocrates, Celsus, Cœlius Aurelianus, Boerhaäve and Pinel, who have pointed out many crises of insanity, but I shall confine myself to observations which I have made in my own practice, and which will justify my opinion respecting the doctrine of crises. Can any one seize upon the order and succession of all the phenomena, which appear in the course of an attack of insanity! Can he point out the signs which are to inform us, by what organ the crises are to operate, and determine the kind of crisis which belongs to this or that variety! Can he determine the precise epoch of the crises! I have been unable to attain this result. I have generally observed, that in the course of the first month after the invasion of an attack, a very marked remission takes place, after which, the delirium returns with greater intensity. At this period, the malady, which previously had an acute and violent course, seems to have reached its termination; yet it passes into a chronic state, because the crisis has been incomplete. This first remission, which I have studied with the greatest care, ought also to be attributed to the cessation of the symptoms, which complicate insanity at its commencement. If the crisis is complete, the malady ceases. Thus, during the first month of the invasion of insanity, a greater number of the insane are cured, compared with the whole number of cures effected, than during the succeeding ones.

Mental alienation *terminates by resolution.* This termination, which is very rare in chronic insanity, is announced by a general sense of feebleness, of

lassitude and fatigue; by paleness of the countenance, and the diminution of muscular activity; by the return of sleep and appetite, or the cessation of voracity; by the reëstablishment of the secretions, or by their diminution when too abundant. All these circumstances, coinciding with the progressive cessation of the delirium, and with the manifestation of moral sensibility, announce an approaching cure. The cure is effected if the patient returns to his former views, affections, habits, and character. If we observe farther, we are assured that this individual who, during his delirium, could not shed a tear, now weeps readily; that another, subject to a cough, expectoration and perspiration, and to pains in different regions of the body, has recovered from all these slight infirmities which are the safeguards of his good health: for, to the observing physician, resolution itself is not merely the normal and successive return of all the functions; as he always notices some slight critical phenomenon. If we add the following signs to those which I have just pointed out, we shall then have the characters of a perfect cure. The patient should retain no painful recollection of his malady, and he ought to speak of it with indifference; to meet again, without repugnance, those who have had charge of him, and to revisit without reluctance, those places in which he was treated. And he should not be unduly fearful with respect to the future, and adopt, without pusillanimity, the advice which is given him for the preservation of his health. These last characteristics are so essential, that if they are wanting, I always distrust the cure of an insane person. I have seen individuals restored to reason, who dared not visit me on their first return to society, but who came with pleasure, some months subsequently; having at that time a distinct recollection of their malady, but with it a sense of reëstablished health. I have seen others, who could not surmount the mortification and shame of having been insane, remain melancholic, and soon after, yield to a new attack.

A young man, twenty-one years of age, of a sanguine temperament, strong and robust, spoiled by the kindness and continual flatteries of his relatives, of an obstinate and proud disposition, applies himself much to study, in order to render himself distinguished among his comrades. He was delirious for some days, during the winter of 1805, and suspends his studies for a brief period; returning to them afterwards with renewed ardor. Experiencing some slight opposition, he is seized with an attack of mania, near the close of the month of December. He requires attentions from every one, complains of both his parents, wishes to manage the affairs of the family, and to direct them according to his fancy. He is quarrelsome and passionate in his intercourse with his father and mother, his friends and associates. His delirium extends to every variety of subject, but sentiments of ambition predominate.

M. B. is committed to our care, Jan. 11th, 1806. In stature he is tall, his hair is black, his complexion ruddy, his mobility extreme. He gives himself the airs of a man of consequence, eats much, and drinks in proportion. Any resistance to his inordinate desires throws him into fury, and he breaks every thing. Thus he passes three months, alternating between calmness, delirium and fury. If, for a brief period, he seems rational, it is only to grieve, and fall into a sort of despair. Tepid and shower baths, acidulated drinks and isolation, effect a cure in four months, but my convalescent is sad, gloomy, melancholic, and uncontrollably idle. He travels several months, by which means his sadness is dissipated, but nothing enables him to triumph over the shame of having been insane. Restored to his family, and enjoying the perfect use of his reason, he engages in the exercise of the chase. After six months, when his parents feel satisfied and perfectly secure, M. B. is found dead in the midst of a forest, by the side of his gun.

I have noticed convalescents who, for a longer or shorter period, experienced vexation in consequence of having been sick, and expressed it by complaints, prejudices, and reproaches without motive. I have seen some who

still had pains in the head, and cardialgia; others believed that they still heard voices, which addressed them, even *internal voices;* while others still, entertained strange ideas, and acted singularly; sure signs that the cure was not perfect. If with the normal reëstablishment of all the functions, with the return of appetite, of sleep, of a moderate fullness of habit and regularity of the secretions, the delirium does not proportionately diminish, insanity persists, and becomes, so to speak, constitutional, or passes into dementia. Sometimes, mental maladies terminate by *the predominance of activity in the absorbent system.* At the conclusion of almost all maladies, the subjects of them, during convalescence, gain flesh to a greater or less extent. This happens also, in insanity. There are individuals however, particularly those of a temperament remarkably lymphatic, whose absorbent system acquires so great activity, that they become very fat, attain an inordinate fullness of habit, and remarkable obesity. This condition augments progressively for several months, and at the same time, the intellectual and moral faculties recover their activity. It continues to augment, after the perfect reëstablishment of reason, for several months, but finally diminishes to the point to which the patient was accustomed, previous to his illness. This termination is sufficiently frequent to merit notice.

A lady, twenty-three years of age, of a lymphatic temperament, and of a mild and timid disposition, whose father was subject to violent cephalalgia, had suffered from several grave affections, and even delirium, at the epoch of her first menstruation. Married at the age of twenty-one years, to one of the most distinguished generals, she immediately becomes pregnant. Whilst in this state, she leads a sad and monotonous life, has presentiments respecting the result of her confinement, and ardently desires the return of her husband, who is in the army. Mad'e D. is happily confined. On the seventh day following, she experiences a severe moral impression; the lochia are suppressed, she is seized with delirium, and becomes furious. Some days afterwards, the lochia reappear, and composure returns with reason. On the twenty-fifth day after her confinement, she imprudently sits down upon the grass. New disquietude succeeded. The lochia were suppressed, and she experiences a sort of syncope. Delirium and fury reappear with more violence than at first. She is bled and bathed. They have recourse to soothing remedies and antispasmodic drinks, but the delirium increases. They hope that the presence of her husband will change this condition. He returns from the army, sees his wife, and is prodigal of his attentions; but in vain. They are both sent into the country. The husband soon becomes the object of his wife's fury, and his presence occasions violent fits of anger. At length, after three months, the patient is committed to my care. Her countenance is pale, skin earthy, eyes fixed, breath fetid, and there were convulsive movements of the muscles of the face. There is general delirium, continual muttering, resistance to whatever may be proposed to her, inappetence, constipation and insomnia. Tepid baths, laxative drinks, and exercise in the open air, are prescribed. After three weeks the fury ceases, but the delirium persists, and at times, she strikes. On the second month, and the fifth of the malady, we apply a large blister to the neck, which discharges very abundantly, and laxatives are continued for several days in succession. At the sixth month, the sleep, as well as the appetite, begins to improve. At the seventh month, the patient eats voraciously, and sometimes replies correctly to questions that are addressed to her. At the eighth month, the vesicatory is suppressed, and she takes an infusion of saffron, foot baths, exercise and carriage rides. The menses reappear, and the patient begins to gain flesh. Her complexion and skin become more clear, and reason progressively returns. At the close of the eighth month, her obesity is so great, that the young lady becomes solicitous respecting it. I tranquilize her mind, by assurances that it is altogether factitious, and will be dis-

sipated, in proportion as her health improves. On the ninth month, being perfectly convalescent,—after several days' preparation,—I announced to her the death of her husband who was killed in the army. She experiences convulsive movements, which give me uneasiness. I console and tranquilize her, I surround her with amusements, and she sees her family. Her convalescence is not interrupted. The obesity continued for several months more, and was dissipated only at the expiration of two years, although her health was perfect. I could cite many similar facts, particularly the example of a young person, eighteen years of age, who, in consequence of a panic terror, becomes a maniac. After six months of delirium and fury, the obesity became so considerable, that I thought it necessary to apply a vesicatory; the patient already experiencing constraint in her respiration, and a sort of dementia.

It happens that, (without our being able to assign the cause of it), some individuals become excited, quarrelsome, subject to fits of anger, and wonderfully emaciated, many months before an attack of insanity. Almost all the insane grow lean during an attack, except those who are threatened with dementia. We have just seen obesity terminate insanity; the contrary sometimes happens. The patient is reduced to the lowest degree of emaciation, and insanity is terminated by the most alarming phenomena. The skin becomes brown, black, and cadaverous. Feebleness is extreme. The patients have no longer the physical energy necessary for the manifestation of delirium, still less to be furious. They are almost voiceless. At the moment when we believe them ready to succumb; when they seem to have reached the utmost limits of existence, they return from the portals of the tomb, to life and reason. Sometimes, this condition is aggravated, by swellings of the extremities, gangrenous eschars, and by a relaxed condition of the bowels. If there is no organic lesion, if the patient is well nourished, if they strengthen him, and ward off too violent moral impressions, the disease terminates in health.

A Jewess, nineteen years of age, of a lymphatic and nervous temperament, of a good constitution, but menstruating irregularly, is deceived and abandoned by her lover. She leaves the house where she is at service, and runs about the streets, scarcely knowing where she goes. On returning, she hangs herself. They have only time to lend her the most pressing attentions. She becomes furious, and on the next day is conducted to the Salpêtrière. This patient is of middle size, with black hair and eyes, a dejected expression, a countenance alternately very red or pale, a fetid breath, and livid lips. She refuses every kind of food, and becomes furious when they offer her any nourishment. She desires to remain naked in her cell. The moment any one enters her apartment, fear is depicted upon her countenance and her whole person. She supplicates them to wait until the next day, persuading herself that they are about to seize and conduct her to punishment. She believes that a flag-stone that covers a gutter, conceals a frightful precipice, filled with all manner of filth, serpents and venomous beasts, and that it is into this, that they desire to precipitate her. She eats not, because they wish to poison her, or deduce a reason from what she shall eat, in favor of her condemnation. She often makes vain efforts to weep. Sometimes she cries during the night, and remains upon the pavement of her cell covered only with her chemise. Notwithstanding the rigors of winter, they find her squatting naked, in a corner, upon the stone. Throughout the summer, she exposes herself almost naked, to the heat of the sun. During eight months of delirium and imaginary terrors, of groans and anguish, the patient loses flesh, and her skin becomes perfectly brown, like that of a mulatto. This young girl scarce breathes when conducted to the infirmary. They administer a tonic potion. On the following day, a serous and abundant diarrhœa comes on. The vital forces give way. In vain do they prescribe remedies to moderate it; the patient is unwilling to

take any thing. The diarrhœa ceases only at the expiration of a month, when N. is thought to be near her end. They cause her by force, to swallow a few drops of wine and broth. Some days subsequently, a more abundant nourishment is taken with less repugnance. By degrees, the forces rally, reason returns progressively, and disquietude only remains. On the eleventh month of the malady, the menses return, and on the succeeding one, are abundant. The epidermis falls off in scales, and the skin recovers the hue of health. Reason is established, and our convalescent is employed in the service of the house, in order to assure us of the restoration of her health.

There are few chronic maladies, that have not been cured by the development of an unexpected fever. All practitioners cease not to express regret at not having it in their power to induce it. Many have endeavored to accomplish this purpose. The physician having charge of the hospital for the insensates at Tubingen in Wurtemburg, causes the insane under his control to take calomel in repeated doses, in order to kindle up a febrile movement. In this, he sometimes succeeds. Cold baths and affusions, produce the same result. What art cannot always accomplish, nature performs for some individuals, and it is not unusual for symptomatic and essential fevers to terminate insanity. I saw it once brought to a close, by an inflammatory fever.

A young man, a native of Caen, twenty-three years of age, of a lymphatic temperament, nervous constitution, and a lively, sensitive disposition, had been much troubled with hemorrhoids. After the early storms of the revolution had passed away, he devoted himself with great assiduity to commerce. At the age of twenty-one years, he conceived a most violent passion for a young person, who did not regard him with indifference. One of his friends revealed to him a purpose which he entertained, of marrying this lady. From that moment M. B. conceals his attachment, and continues to live with his friend and her whom he loves, without betraying his sentiments. He gradually however, became sad, gloomy and retired. Meanwhile, his mother dies, and he experiences in consequence of it, the profoundest grief. He conceives a dislike to his occupations, forms the resolution of abandoning commercial pursuits, of quitting his family and the place where he was born. He rejects those pleasures which are especially interesting to those of his age, and only enters society when propriety requires. He passes the following winter, in this state of melancholy, suffering at one time from constipation, at another, from relaxation of the bowels, and complains of frightful pains in the head. On one of the earliest days of spring, he is unduly heated, and becomes excited in a numerous and noisy assembly. In the middle of the evening, whilst dancing with his beloved friend, he is seized with convulsive movements. The most violent delirium bursts forth, the patient betrays his secret, reveals his love, and reproaches himself, calling incessantly upon the object of his passion. He forgets his relatives and friends, and refuses all assistance. This condition persists for four days, and several men are scarcely sufficient to confine him in bed. The convulsions cease, but the delirium increases. The patient refuses the remedies that are presented to him, and pretends that he alone can cure himself. One of his friends however, induces him to submit to be bled in the foot, and to take some cooling and sedative drinks. Less agitation succeeds, but the incoherence of ideas and actions is the same. He experiences an irresistible desire to walk about, and has recourse to a stratagem, to relieve himself of the watchfulness of his relatives and friends. He threatens and strikes even, those who oppose his wishes, or who accompany him in his walks. Such are the features which characterize this malady, during the first two months, after which the patient is committed to my care, about the middle of the month of April following. On his arrival, he descends from the carriage without noticing any one, ascends the stairs, and descends, and ascends again, with extreme promptitude. On seeing me, he touches my

hand: "You are Bonaparte, I know you, I have seen you; how much pleasure it gives me! are you not him? embrace me; I am your secretary." I endeavor to remove this illusion; the patient insists, and becomes threatening: "You have done well, says he, and I am not mistaken." He runs about, goes out and returns, unable to remain an instant in a place.

A friend who accompanies him, assures him that he is at the house of a physician,—"*Bah! bah! you will not deceive me.*" We sit down at the table, and he devours the provisions set before us. Joy is depicted upon his countenance, his face is flushed, his eyes gleam, and his movements are hasty and abrupt, as well as his speech. He retires, and rises during the night. At break of day, he is with me. He lays hold of all the books that come in his way, puts them in place, takes them down again, returns them, or turns them over and over. He wishes to write, takes up the pen, and lays it down again. He rises up and sits down, goes out and returns to me, and prays me to write a letter to his beloved friend. I decline; he traces himself certain insignficant words, gives me the paper to subscribe, and wishes me to sign a fictitious name. I bring to his recollection the danger there would be in my signing a false one. Fear nothing he says, I am answerable for the whole. I still refuse, and he insists. Finally he seems to yield, but immediately pretends that I am a female in disguise. He goes out hastily, and runs about the court and gardens. He leaps over all obstacles, even a barrier eight feet high. He believes himself possessed of supernatural power, which enables him to surmount all dangers. I place near my patient, a strong and robust attendant, who follows him wherever he goes, without opposing his movements in any respect. His presence resulted in imposing some restraint upon the patient, whilst I exert myself to gain his confidence. After the second day, M. B. wishes to make to me a certain revelation, but the ideas which are to express it, fail him. He collects all the little stones in the gardens, which he regards as gold or diamonds, and of which he makes a collection in his chamber. Upon paper, the walls, gates, the enclosure, and the sand, he writes lines, which he calls verses. He traces insignificant phrases, and always the name of his beloved. His countenance is uniformly very red, his eyes shining and very changeful, his pulse full, hard and frequent; constipation and insomnia obstinate. His appetite is voracious, his loquacity continual, and his mobility incoercible. Nevertheless, we sometimes find him sad and thoughtful; his eyes bedewed with tears, without his being able or willing, to assign the cause of his emotion.

During the first eight days, nauseating drinks are prescribed. From the eighth to the twentieth of May, his muscular activity is very great, and he seems to feel a sort of necessity to destroy whatever comes within his reach: the locks, bed, curtains, and linen, a flute and pipe, all are torn or broken. He believes that he recognizes every one whom he meets, and endeavors to console them, thinking them very unfortunate. He lays hold of whatever he finds. At one moment he runs with extreme swiftness; then suddenly stops, panting and perspiring with fatigue. For a brief period, he appears to be in a revery, but sets off again at a rapid pace, so soon as any one approaches him. While in this state, if I desire to restrain him by laying hold of his arms, so long as I hold him, the muscles of his face are convulsed, and he beats the ground, not with anger, but from impatience, and is constantly moving his limbs and head, not in a menacing manner, but from his internal desire to run. If during his intervals of repose, I question him, he makes no reply. If I offer him advice, he does not appear to comprehend me. His whole being seems to be agitated with an irresistible necessity for motion. I yield to this impulse, and already the patient is far from me.

May 20th. About this time, M. B. becomes more disposed to ask questions, and converses more. His movements are less active, his eyes less lively, his countenance less flushed. He sheds tears, and sometimes seems to realize

his condition, and testifies much confidence. He wishes to write to his relatives, but his letter is destitute of meaning. After a remission of three days, the patient has a new paroxysm, which continues for three weeks.

June 10th. Shivering, cephalalgia, and flashes of heat occur; his countenance is sullen, his eyes gleam, and his pulse is hard, full and strong. He suffers from nausea, and his tongue is covered with a yellowish coat. The patient feels the need of confining himself to bed, and converses rationally.

June 11th. An emetic causes him to vomit abundantly, and also produces several alvine evacuations. In the evening he perspires. June 12th. The gastric symptoms disappear, but there is cephalalgia, attended with a hard and full pulse, flashes of heat, and a feeling of general lassitude, with thirst.

June 13th. He is bled from the arm, and during the night following, the secretions of perspiration and urine are abundant, as well as on the three succeeding days. June 18th. Apyrexia—countenance pale. The patient imagines that he has just awoke from a long dream. There is no lesion of the understanding, but great feebleness of memory. June 26th. Convalescence, and a return of the vital forces. Although the patient seemed to have lost his memory during the delirium, he preserves, at his convalescence, a recollection of the least important circumstances connected with his malady, testifies the most entire confidence in me, and desires to resume his former occupations. He sees his friends again. I multiply around him, so far as possible, the means of diversion. Tepid baths are prescribed on alternate days.

July 7th. Indications of gastric embarrassment. Nauseating drinks are prescribed for three days. Reason perfect. Alvine dejections abundant.

July 21st. This young man returns to society perfectly cured, not only of his delirium, but of his love. One year after, he is present at the marriage of her who had been the object of his passion, and the cause of his disease. Four years subsequently, he marries himself. Since that period, he has become the head of an immense establishment, which he manages most successfully.

I have seen insanity terminate by gastric fever. A military officer, (his brother died insane at the age of twenty years), forty-one years of age, commanded a frontier post, and after having supported all the fatigues of the war, and escaped the consequences of a rupture of the crural artery, becomes insane, through despair at not having received the cross of the Legion of Honor. After the victory of Austerlitz, he prepares a discourse in praise of the victor, commands the garrison to take arms, and orders them to kneel, while listening to this discourse. This conduct of commandant C., gave rise to remarks, which came to his ears. On the following day he is delirious, and has attacks of fury. His brother comes, and removes him to his family, where they both bleed and bathe him. M. C. is gloomy, and regardless of his wife and children, desiring to fly from both them and his country. After some months, he escapes, and proceeds to Paris, to another brother, who receives him with tenderness. After some days, new signs of insanity appear; even jealousy, distrust and excitement; and the patient is committed to my care April 1st, 1806. His eyes gleam, and are very changeable. His countenance is also very much flushed and convulsive. The patient prostrates himself upon the earth, and adores the sun, which he regards as the father of nature. Does he walk in the gardens, he thinks himself in the Champs-Elysées. He looks upon a patient and the gardener as Nereids, as they are occupied in drawing water, another is taken for Rhadamanthus, himself for Minos, etc. At the end of fifteen days, having become more calm, M. C. no longer prostrates himself, converses more willingly, but still believes himself to be the great priest of the sun, son of Zoroaster; now defying Christ, and now considering himself to be Jesus Christ, destined to reform the world, and to improve the moral condition of men. At times, he utters frightful cries, in conse-

quence of agonizing pains; imagining that a fiery serpent has escaped from the sun, and entered his stomach. We apply leeches to the anus, administer baths, douches, and acidulated laxative drinks. Near the close of the month of August, the patient is seized with gastric fever. After five days, it takes the character of a tertian intermittent. I prescribe no remedy, and leave the case to the efforts of nature. After the seventh attack, this soldier had entirely recovered his health.

M. L., a student in surgery, of a slender constitution, and a gloomy, melancholy disposition, had experienced some domestic troubles before coming to Paris, where he devoted himself with the greatest ardor to the study of anatomy; sustaining himself upon slightly nutritious food. From spring-time he sleeps less, becomes querulous among his comrades, and imagines that they make sport of him. Near the close of the month of June, while present at a lecture of professor Boyer, he utters a loud cry; saying, "I am lost, I am damned, I must die." They bleed him in the foot, and in the jugular vein, and administer sedative and cooling drinks. Every attention is lavished upon him. The patient repulses those about him with violence, utters cries, calls them by opprobrious epithets, spits in their faces, is unwilling to drink, and becomes much emaciated in a few days. July 28th. The patient is committed to my care. His countenance is alternately pale and red, his features wan, his eyes shining and fixed; his breath fetid, and his pulse extremely frequent. The delirium is general, with a predominance of religious terrors. He breaks, mars and rends every thing, and endeavors to injure himself. If we offer him any remedy or nourishment, he becomes furious. Several attendants find it difficult to restrain him. His fury is sometimes spontaneous, his thirst urgent, and his dejections involuntary. July 31st. A new and instantaneous paroxysm of fury, followed by a comatose state, which we believe feigned. Towards evening his face becomes very much flushed, skin hot, pupils dilated, and his right arm very painful, when he attempts to extend it. Pulse frequent, delirium continued. At evening, the urine is tinged with blood. Acidulated and nitrous drinks are prescribed, the tepid bath, cold water to the head, etc. Aug. 1st. The right arm is covered with an erysipelatous eruption, the urine sanguinolent, and the pulse very frequent. 2d. Same as at evening. 5th. Symptoms all exasperated, pulse very frequent, and subsultus tendinum. A drachm of camphor and nitre are taken during the twenty-four hours; wine whey, and vesicatories to the limbs. 6th. Frequency of the pulse diminishes, perspiration abundant. 7th. Apyrexia, continuation of delirium. 8th. Paroxysm of fury, apyrexia. 9th. Delirium and fury. 10th. Slight paroxysm, delirium, general sense of feebleness, paleness of the countenance. 12th. The patient rises; incoherence. Camphorated Peruvian bark. 16th. Eruptions over the whole body. 18th. The pimples grow white; at times delirium. Vinous water, as a drink. 22d. Progressive return of the vital forces, and the patient, rather restless than delirious. 28th. Convalescent. He is now put upon the use of analeptics, milk, and exercise. He sees his parents with composure, and at length, after some days of painful reveries, returns to the bosom of his family, where, after a long and trying convalescence his health is perfectly restored. It is many months before he is able to resume his studies, his brain remaining very feeble. After an interval of a year, he returns to Paris, and resumes his medical studies with the greatest success.

We had at the Salpêtrière, a woman who had an attack of mania, on three successive years, and which terminated by an ataxic adynamic fever. I prevented the fourth attack, which she would otherwise have had on the following year, and this year (1815), she has not even had the premonitory symptoms.*

* Galen reports the cure of one case of mania, by a quartan fever.

Hemorrhages, whose suppression often causes insanity, sometimes terminate it. A young man, nineteen years of age, while attending the school at Fontainebleau, is seized with an attack of mania, which renders the most energetic treatment necessary. He is bled largely. After fifteen days, his agitation ceases, and the patient becomes, as it were, stupid; wallowing upon the ground, devouring substances the most filthy, speaking not, and disposed to strike on the slightest opposition; yielding sometimes to spontaneous acts of fury. His face is flushed, his eyes rendered dim by a discharge, and his nose and mouth are constantly full of a mucous matter, which runs out upon his garments. The patient often attempts to beat his own head. After many months of useless attentions, I resolve to employ sternutatories. He bled at the nose at times for several days, and reason began to return. Convalescence soon followed.

During the war of Vendée, M. G., the father of a family, about thirty-eight years of age, large and strong, being in the habit of losing blood every year to remove a sore throat which made him apprehensive of suffocation, neglected this precaution. In the summer of 1800, he is often obliged during the night, to sit up in bed, feeling as if he were about to suffocate. At the approach of winter, these symptoms disappear, but the patient becomes uneasy, jealous, timid and gloomy, with respect to certain matters of importance. At the beginning of April 1801, it is observed that he is absent minded, and indifferent about his family and business. He goes out and comes in without a motive, censures himself for his faults before every one he sees, and asks pardon for them. On the day following a sleepless night, he suffers from agitation and delirium. An emetic is given him. Twelve leeches applied to the feet, relieve him. He is confined to his bed, and some days subsequently, leeches are applied to the anus, and a tepid bath given. Health is restored. Two months pass; but towards the end of June, a new paroxysm occurs, accompanied by a chill and fever, and a refusal to employ any remedy. Six men with difficulty confine the patient to a cold bath; on leaving which, he is more rational. The same baths are employed on the following days, with equal success. This paroxysm lasts eight days, and since that period, is renewed almost every month. We have successively bled, purged and bathed the patient. Towards the end of autumn, the paroxysms are irregular. The patient talks irrationally, and is at times, turbulent and passionate. He is, ordinarily, rather gay than sad. In his lucid intervals, there remains an air of assurance, an imperious tone, and a kind of laugh, foreign to his natural habit.

After a year's treatment, the patient was sent to Paris, and committed to my care, Feb. 25th, 1802. M. G. has light hair, bright eyes, a countenance very much flushed, and the external appearance of a strong man, in the enjoyment of excellent health. He is troubled about nothing. He goes and comes, playing tricks upon every body, laughing till his sides ache, at the merest trifle, and sometimes at nothing. No idea, no recollection, could fix his attention for a moment. Content with himself, he is the friend of all, and has not a thought for his family. Suddenly, his face becomes more flushed, his eyes are red and glistening, and there is heat in the abdomen. Afterwards, the most general delirium seizes the patient. He threatens and strikes. A great array of force does not impress him. This state persists for seven or eight days, and terminates by a general sense of fatigue, with a desire to sleep. It is renewed several times. The intervals between one paroxysm and another, do not leave the patient exempt from the full force of the delirium. He is proud and haughty. He insults every one, and is constantly laughing convulsively. During the paroxysm, the patient experiences heat in the head, and a burning sensation in the stomach and intestines. Acidulous and nitrous drinks are exhibited, tepid baths, douches, lotions of oxycrate to the head, leeches to the anus, pediluvia, acidulated drinks and laxatives. During the first two months,

composure and excitement alternate. Cold baths and douches are demanded by the patient.

August. Peruvian bark during the remission; leeches to the anus daily, for fifteen days; tepid baths, with cold water to the head, exercise, and diversion by the culture of the garden. A hemorrhoidal flux comes on, which is so copious for several days, that I become alarmed. The patient is pale, thoughtful, gloomy and timid; desiring to return to his family, and reasoning very properly. September. A return of the hemorrhoids, and a continuance of health. Towards the end of the month, the patient still laughs at times, without cause. On the following month, the hemorrhoids again appear. Composure and correctness of thought, are more marked. Tired of a life of inactivity, our patient returns home on the twenty-first of October. In the spring following, his relatives and friends fear a relapse. I advise the application of leeches to the anus, foot baths, lotions of vinegar to the head, acidulated drinks, and aloetic purgatives. The hemorrhoids discharge, and all uneasiness is dissipated. Five years subsequently, he sees one of his children suspended from the casement of the garret window, ready to fall, and many people hastening thither. Almost motionless from fright, he runs and saves his son. To this violent emotion, succeed all the signs of a new attack. They make repeated applications of leeches, and administer baths, with cold water to the head, together with cool and laxative drinks. In this instance again, the symptoms only appear.*

I never knew, from my personal observation, insanity to be terminated by the rupture of varices, but was acquainted with one person who was insane, and who, at this time, is advanced in life, and has varicose limbs.† Suppression of the menses is a frequent cause of insanity, whether it may have been produced by a strong moral affection, or some error of regimen. Insanity, depending upon this cause, terminates by the reëstablishment of the menstrual flux. However, when hereditary disposition, or a vice of conformation predisposes to insanity, which occurs from an accidental cause, at the commencement of the malady, the menses are suppressed. But though promptly restored, they do not relieve the patient from the malady. When the menses flow freely without a return to health, we may then fear, lest the patient become incurable; but so long as they are not established, it is proper to entertain some hope of cure, especially in early life.

Mad'e C., twenty-nine years of age, and the mother of two children, having had distant connections affected with mental alienation, was of an extremely jealous disposition. Scarcely is she married, than her jealousy is called forth with respect to her husband, who however, furnishes no occasion for the exercise of it. Without any assignable cause, she experiences a violent attack of jealousy, followed by the suppression of the menses, and a maniacal delirium. After some months of fruitless treatment at home, she is committed to my care. Her hair and eyebrows are black, her brow wrinkled, her eye bright and concealed beneath the eyebrows, her look asquint, tongue white, and the body loaded with flesh. The patient believes that she hears her husband, and supposes that he is near her, but concealed and retained by his mistresses. The women who surround and serve her, excite her jealousy. She hears them speaking in abusive terms, in a low and cowardly tone. Now, she remains whole hours without moving; now springs with the speed of an arrow, takes a hundred steps and stops. She has heard her husband, who is absent. At other times, her step is slow and tortuous.. She makes the day to consist of forty-eight hours; breakfasts and dines on the first, but does not retire to bed. On the following day, she takes luncheon and sups; and the day being finish-

* Zacutus-Lusitanus relates a similar case.

† Decaballis, *Phenomena Medica*, says that mania terminates by the rupture of varices. Hipp., aph. 21, sect. 6. Boerhaäve, aph. 124.

ed, she retires. It was several months before she could decide to retire voluntarily on the intermediate day, or change her mode of measuring time. She persuades herself, that those about her are constantly occupied in acts disobliging to her, which provokes, on her part, outbreaks of fury. The abdomen is voluminous, hard, and often affected with colic pains. Constipation is obstinate, and persists from fifteen to eighteen days. In vain do they desire to administer an enemata, and apply leeches. She believes that they wish to violate her person, because, says she, men must have several women. Six months pass in this state, and she makes less resistance to the use of the bath. At length, they oblige her to take hip-baths daily, and to drink a laxative ptisan. The patient appears a little more calm, although her face is very much flushed. She complains of colic pains, and is more ready to do what is prescribed for her. However, her notions and infatuations are the same. She does not recognize the hand-writing of her husband, and is unwilling to hear her children spoken of, though her condition may be somewhat improved. I resolve to send her abroad in a carriage on the three days of the carnival. She enters it on compulsion, and rides for four or five hours each day. On returning at evening, she appears less gloomy and dissatisfied. On Monday, the menses make their appearance, and flow abundantly on Tuesday. From this period all her views are correct, all her prejudices are dissipated, her hallucinations cease, the excretions are reëstablished, and at the end of a month, she is in a condition to return to her family.

Mad'lle E., thirty years of age, of a nervous temperament and delicate constitution, a vigorous imagination, a mild and sensitive disposition, is abandoned by her lover, by whom she had become a mother. She becomes sad, and grows lean rapidly. The menstrual flow is imperfect, irregular and scanty. She suffers from constipation and colic pains. Some months after this period, the fruit of her labor and economy is stolen from her. The menses are suppressed, and her child dies. Her grief is at its height. The menses do not appear, and at the expiration of ten days, the most violent fury bursts forth. The patient is delirious on all subjects, and is brought to the Salpêtrière Oct. 13th, 1801. She has black hair, a dark complexion, haggard eyes, a countenance very much flushed, though sometimes pale, a fetid breath, and livid lips. She suffers from extreme agitation, utters cries, indulges fear, employs menacing language, and at intervals, breaks out into convulsive laughter. She swears, strikes, and does not recognize her relatives and friends. Notwithstanding the disorder of her ideas, she is disconcerted on finding herself in a hospital, and is more composed. At night her agitation returns. Constipation obstinate. Fifteenth and sixteenth. Tepid baths with cold water to the head. There is composure, occasional colic pains, transient chills, and momentary paleness of the face. Eighteenth. The patient listens to suggestions and advice; testifies some degree of confidence, and is less delirious. The alvine dejections are effected with pain, and the sleep is light. The menses appear. Nineteenth. A very marked remission. She walks with naked feet, which is followed by a suspension of the menses, flushing of the face, and gleaming of the eyes. There is general uneasiness and disquietude, distrust and transient delirium. Foot-baths and aromatic drinks. Sleep follows, and a return of the menses, which flow abundantly. On the following days the patient experiences every evening a slight febrile heat, succeeded by a copious perspiration. On the following month, the menses appear without effort or excitement, and she is restored to her family, some days after the menstrual period, yet experiencing violent attacks of hysteria.

Affections of the skin merit special attention in the study of insanity. The repercussion of herpes has often caused this malady. Sometimes insanity appears so dependent upon the development of a psoric affection, that it appears at the same time that the herpetic eruption becomes manifest.

A young man, seventeen years of age, being at the lyceum in the province, is suddenly seized with an attack of mania. He is committed to my charge. I prescribe tepid baths and a cooling drink. There is manifest upon his countenance, a herpetic eruption, which gradually becomes extinct, and at the same time that the delirium disappears. A month after, his father brings him to Paris to pass the carnival there. He becomes greatly fatigued. On Shrove Tuesday he got tipsy, and his father brought him back again to me, worse than at his first attack. Herpes covered his whole cheek, but after the use of tepid baths, of bitter and sudorific ptisans, together with much exercise, it disappeared along with the delirium. During the following autumn, after a frantic revel, delirium returns, in connection with the herpetic eruption. For two years, it appeared in spring and autumn. For the last four years, this young man, having submitted to healthful regimen, and led a very active life, has enjoyed excellent health, and for two years engaged in the war.

A young Englishwoman, while residing at Rouen, becomes furious, and is brought to me, covered with a herpetic eruption. She is cured after four months, of the attack. I apply a vesicatory, and advise a mild regimen and baths. Every thing is neglected. In the spring of the following year, she has a new attack. The body is covered with herpes. After the cure of this second attack, I apply a vesicatory, and the use of the baths is continued. The blister is replaced by a cautery. Since the epoch of the return of the malady is passed, certain red spots appear upon the person, unattended by cerebral symptoms; but violent colics, hysterical syncopes and vertigoes, coincide with a greater eruption upon the surface, yet without delirium. Baths, depuratory drinks, and an active life, dissipate all these symptoms. This young woman enjoys perfect health for five years, and has returned to her native country, where she has met with many causes of chagrin, and changed her regimen and mode of life, without being sick.

If herpes causes insanity, if it sometimes proceeds in company with it, without doubt it sometimes terminates it. I have observed this termination.

A young man twenty years of age, very strong and robust, had, at the age of seventeen years, an herpetic eruption which occupied the whole of the right side of the chest. By the use of appropriate remedies, he was cured, and gave himself up to study, and particularly to pleasures. The disquietudes connected with the conscription, caused him to lose his reason. He is much agitated, and commits a thousand extravagances. At the expiration of a month, he is committed to my charge. I leave the patient to his fancies. He bathes and takes a laxative ptisan. A month has scarcely elapsed, when a herpetic eruption appears upon the left foot. His ideas immediately become more just, his conversation is connected, and a few days subsequently, this young man enjoys the full measure of his reason, and in less than six weeks is restored to his family.

It is the consequence of psora as well as of herpes. During the last campaign in Prussia, they brought into the military hospital a horseman, presenting all the symptoms of an ataxic fever. After some days' observation, Doctor Roux,—now principal physician to the army, believed that he recognized a veritable mania. He prescribes tepid baths. From the time at which the first bath was given, he notices the eruption of psora. The baths are continued. This eruption extends over the whole body, and the delirium lessens in proportion as the psora progresses. After fifteen days the patient is restored to reason, but the body is covered by this cutaneous affection. The mildest measures are employed. It is removed, and at the close of the second month, this soldier resumes his duties.

M. de S., twenty-seven years of age, of a nervous temperament, descended from a father whose imagination was singularly disordered, having had also an uncle and sister insane, and possessing a very strange and inconstant disposi-

tion, had been attacked with psora while in the army. This affection was treated, and disappeared in a few days. Four years afterwards, having left the service, he abandoned himself to the grossest irregularities, committing every variety of excess in regimen. He experiences some opposition, becomes sad, complains of constipation and pains in the head, and loses much flesh. After two months, he suddenly becomes furious, and knows not the voices of his relatives and friends, whom he strikes indifferently. He believes that every one deceives him, that he is going to be given up to justice, and that his mistress will be sacrificed. He converses little, refuses nourishment, or eats voraciously. After some days, he is committed to my care, Jan. 24th, 1808. He has light hair, eyes blue and fixed, face pale, breath fetid. There was a general trembling of the body, attended with an expression of fear, so soon as any one approached him. His lips were in continual motion, and he obstinately refused either to speak or move. At other times, the patient moves about and converses much. Several times, he endeavors to dash his head against the walls. At these seasons his face is extremely red, and his eyes gleam. There are moments when he gives himself up to the commission of the blindest acts of fury, employing whatever comes to hand, to assail any individual who may approach him. This patient has since infomed me, that he distinctly heard a voice, which counselled him neither to speak, walk or eat; and which assured him, that he must slay some one, in order to be saved and free. This voice kept him awake, threatening him with dangers the most terrible. Application of leeches, acidulated drinks, and tepid baths.

May. Nauseating drinks for many days together; provoking abundant dejections, and a slight eruption upon the skin. June. Bitter drinks, tepid baths, and the application of leeches to the temples. The patient converses more willingly, sleeps a little, and trembles less. There is a manifest remission. July. Leeches applied anew to the head, cold baths, douches. A marked amelioration. August. An aloetic purgative, tepid baths, and a blister to the neck. A more marked advance towards reason succeeds. Pimples are more numerous upon the body. September. Convalescence perfect. The patient is restored to his family during the month of October; his dejection, irresolution and sadness continuing, or giving place to a disordered gayety. Nov. He gives himself up anew to some errors of regimen, and resumes his former disposition; at the same time informing me that his cutaneous disorder has returned. In fact, I examine him, and find his body, particularly the arms, covered with pimples, attended with an insupportable itching. I was unable to induce him to take care of this new affection, which tormented him for more than a year. There has been no cutaneous affection for four years, nor has his reason been affected.

M. de X., a general and inspector of reviews, thirty-eight years of age, of a sanguine temperament, tall, with black hair, a lively and glowing imagination, gave himself up to excessive masturbation, although very devoted to study, and leading a very active life. He experienced, two years since, excessive mortifications, which rendered him sad. He is sent to Italy, takes the itch, and treats himself. In eight days, the eruption disappeared. He now experiences some opposition, called forth by the uprightness of his conduct, and the severity of his inspection. His disposition is soured, and he becomes irritable and passionate. They impeach him, and he goes to Paris to justify himself. Certain indications of delirium are noticed in his conversation. One of his friends is so imprudent as to say to him, that he had been impeached because he was insane. He then becomes so in reality; is furious, and threatens the lives of all those who surround him, even that of his wife. They bleed him several times, bathe him with cold water, and administer the bath of surprise. He sinks into dementia, complicated with general paralysis. Suffering from involuntary dejections, momentary attacks of fury, fright, when-

ever any one approaches him, voracity, insomnia, and constant cries, he is committed to my care in the spring of 1805. Baths, whey, aloetics, and Peruvian bark are successively administered, and the severest watchfulness is exercised to prevent masturbation. Exercise, both by walking in the open air, and by riding, is taken; yet nothing changes the condition of the patient. But though extremely fearful, he becomes affectionate, extending his hand, and smiling, to all those who approach him. Hoping that if I could again communicate to him the itch, I should cure him, I employed tepid baths, and friction morning and evening. He takes tonics internally, and sleeps in the shirts of those affected with this disorder for fifteen nights. Professor Alibert provides me with the virus of psora. I make about the articulations of the limbs, more than eighty punctures, with no better success. I cause the patient to sleep anew in infected shirts, with no better success.*

[The immediate cause of psora being now well understood, the want of success in inoculating with the matter of the vesicle is not surprising. Not only is there nothing specific in this matter, but the insect (*Acarus Scabei*), by whose irritation it is produced, is not found in the vesicle itself, but distant from it usually two lines in extent.]

Chilblains have also some influence upon the progress of insanity.

I had charge of a young man eighteen years of age, who, from the age of thirteen years, had been in a state of mania, which alternated with dementia. The delirium lessened, and reason resumed its seat for many months, while he was tormented with chilblains on his heels and the fingers of his hands. The sores discharged abundantly. Several issues were established, after the suppression of the chilblains. This young man continues in a state of dementia, accompanied by fury, which has assumed an erotic character since the age of puberty.

Furuncles often make their appearance among the insane, and become critical in some cases, especially when the suppuration is very abundant. I have observed this critical termination, particularly in the case of two individuals, both of whom were exceedingly fleshy, and had what is called a humoral constitution.

M. de T., an old soldier forty-seven years of age, descended from a father and uncle who were insane, of a sanguine temperament, subject for a long series of years to a trembling of the hands, was of a mild disposition, indifferent, irresolute, of limited mental capacity, and poorly adapted for study. Although destitute of passion, he was very fond of women, and by no means difficult in his choice. His education was neglected, and his fortune impaired, both by the injustice of his relatives, and the consequences of the revolution. His wife having had eleven abortions, he was greatly afflicted, in consequence of not having children to whom he could leave his name and fortune. For some time past, the trembling of the hands having diminished, the patient has been troubled with hemorrhoids, and has become gloomy. During the year 1801, he became sad, taciturn, indifferent about his affairs, his wife and friends; indulging also in many liberties with the ladies. Eating much, and taking little exercise, he becomes corpulent. Spring of 1802. Impairment of the intellectual faculties, especially of the memory. The patient leaves his house without a purpose, and returns thither without a motive, and at all hours. Twice, on the same day, he goes on foot to the residences of a lady and a cousin, to demand their hand. At another time he wishes to drown himself. Finally, he sometimes leaves his hotel, and not returning, is found

* Gardane assures us, that mania can be cured by inoculation. Fischer and Riedlin make the same observation. Decostes mentions a case of mania, which was cured by the itch.

on foot, many leagues distant, upon the public road, not knowing whither he is going. May 1st, 1802. The patient is brought to Paris, and committed to the care of Pinel and myself. His face is pale, features relaxed, his eyes fixed, his hands tremble. He totters upon his legs, has a voracious appetite, thirst, and difficulty and pain in urinating. His memory is enfeebled, and intermediate ideas are wanting, to carry on a process of reasoning. Sometimes, he becomes violent, and his delirium then takes the form of excitement. His face is flushed, his eyes glisten, and his movements are free and constant. He cries, breaks, rends, displaces and gathers together every thing that he meets with. Leeches are applied to the anus, which occasion an abundant discharge, and laxative drinks produce dry and black dejections. His sleep is troubled by frightful dreams.

June. Baths at 22° (Reaumur); douches, with no effect. Blister to the neck, followed by a remission. Some days afterwards, he has a rigor, with a tendency to stupor. There is a return of delirium, attended with agitation, fury, and a desire to destroy. Leeches are applied to the anus. 19th. A hemorrhoidal flux, followed by still greater exasperation of the symptoms. He indulges in obscene proposals, and makes up a matrimonial project. He has an irresistible desire to walk about, and employ his hands in doing mischief. Baths, with lotions of cold water to the head. 29th. Suddenly, amidst frightful cries and howls, he calls upon his son, (though he has no child), and persists in remaining naked. His face is at this time exceedingly red, his skin hot, and fury bursts forth on the slightest opposition. These symptoms increase during the night. We multiply lotions of oxycrate upon the head, and several tumblers of an emulsion are drank with avidity. We permit the patient to walk about naked in the open air, and spunge him with cold water, but nothing soothes him. At two o'clock at night, the patient who was asleep in bed, overcome by fatigue, is awoke by a frightful dream. He thinks that he is surrounded by robbers, and places with difficulty his bed against the window to prevent their entrance. At the same time, he utters frightful cries, and strikes, with redoubled blows, against the walls and door of his chamber. I hasten to the patient. Neither my exhortations, nor the presence of several attendants could reassure him, or cause him to cease his vociferations. His face is very much flushed, the blood-vessels of the neck and head greatly enlarged, the skin hot, and his fury extreme. I threaten the patient with the douche. He desires, and receives it; becoming composed, while the water is falling upon his head. He thanks us for the favor we have done him, retires to bed, drinks several glasses of very cool emulsion, and sleeps finely the rest of the night. 30th. Calm. There is however, a wildness of action, which seems to be aroused by the genius of destruction. Whilst tearing up his linen, he assures me, that he is making shirts, sheets and mattresses. The vesicatory discharges, although it was often plucked off. A bitter and laxative ptisan.

July 1st. Return of his cries, agitation and fury. Lotions of vinegar and water applied to the head and the whole body, are followed by sleep. 3d. Furuncles upon the back and arm; composure, sadness, tears; less delirium, but the same desire to use and exercise his hands; diarrhœa. 5th. Symptoms again exasperated. They are temporary, and during their continuance, his face is very red. 8th. Application of leeches to the anus. The vesicatory and several boils dry up, from the impossibility of employing dressings upon them. 9th. Composure and agitation alternate. He destroys every thing; demolishing, he says, to build again. He breaks, in order to make new objects. He roots out the trees, in order to quicken vegetation. He tears up his linen, in order to increase the quantity of it. He marries himself to seven or eight women, and is noisy during the night. At times, he howls. 10th. At one o'clock at night, he throws against his door, the wood-work of

his bed, which is of great weight. We come to the patient, and find him pale, trembling and frightened. He thought he had seen four robbers, who wished to enter his chamber. We encourage him, wet his head and spunge his whole body with very cold vinegar and water. He then goes to bed, and sleeps perfectly well the rest of the night. 12th. Tepid baths, douches every other day; composure, lucid moments, and sleep. Towards the end of the month his agitation returns, always preceded by palor, and accompanied by redness of the face, heat and thirst. The blister has dried up, and the boils ceased to suppurate. The diarrhœa has also ceased. 30th. Lucid moments, walks abroad. The patient tears less, remains clad, eats with propriety, but at break of day, overturns every thing in his chamber. Tepid baths, aloes, and powdered rhubarb, mingled with pulverized orange leaves.

Aug. 20th. Several boils appear; same treatment; bitter drink. 27th. Manifest progress towards the use of the reason; patient writes to his wife. 30th. Abundant suppuration of the boils, and sleep. The patient no longer tears, but every morning his bed is overturned.

Sept. 4th. Redness of face, agitation, delirium, impatience. The boils discharge a little; return of strength. 13th. New boils, composure, scarcely any delirium. 21st. Abundant suppuration of the boils. The patient enjoys the perfect use of his reason, desires to see his wife, and speaks of returning home. 29th. Agitation, tears, extravagant notions, abundant stools. Laxatives in combination with bitters, and alternating with tepid baths.

Oct. 11th. Reason perfect, memory somewhat enfeebled; face flushed at times; slight embarrassment in speech; step slow and uncertain. The boils begin to dry up. Takes exercise both by walking and in a carriage. *Peruvian bark and sack. Issue upon the arm.*

Nov. Reëstablishment of the vital forces, muscular movements easy, gayety, and social civilities. 25th. Arrival of his wife. He was more sad and thoughtful on the following days. Every evening his eyes are red, and his head aches. 28th. Slight paralysis of the tongue; dissipated by exercise and labor in the garden. Foot baths, rendered stimulating by mustard, employed for several days in succession; purgative enemata. Leeches to the anus on the 29th.

Dec. Vesicatory to the neck, which has discharged for some days. Infusion of arnica. Health perfect. The patient leaves for the country on the following month, during a very cold period. His carriage is overturned, and falls many feet without his reason being in the least affected by this violent shock. Five years afterwards, M. de T., whose hemorrhoids discharged abundantly, and who enjoyed excellent health, died suddenly, from a cerebral hemorrhage.

A lady, twenty-seven years of age, of a lymphatic temperament, having light hair, and a mild, though decided disposition, the issue of a mother whose ideas and schemes had always been exaggerated, has been nursing for three months. Her husband is obliged to be absent. From that evening, she worries and torments herself respecting him. Now, she fears that he is slain; now, that he is going to abandon her. On the following day, her friends, wishing to divert her, write for her to visit them. Scarcely has she complied with this invitation, before she begins to seek her husband every where, and suffers from the most violent delirium, which his arrival does not dissipate. After a delirium of three months' duration, which is often attended with fury, the patient is committed to my care. She is in a state of religious melancholy, having a pale face, convulsive features, and rarely speaking. She eats little, and with difficulty. Constipation is obstinate. The patient is unwilling to take any remedy, but desires to die, and invokes death. I order a vesicatory to the neck, which she supports but a few days. We have recourse to mild purgatives. After three months, reason is restored, but the patient

remains gloomy, sad, diffident, jealous and choleric. Nevertheless, she returns to her family. After some days, an enormous furuncle appears upon the perinæum. Suppuration is very abundant for fifteen days, and from that time, her health is perfect.

Abundant suppurations, whether spontaneous or provoked; the reopening of ulcers and issues, have also, sometimes terminated insanity.*

M. C., an officer of the guard, twenty-five years of age, very tall, of a feeble constitution and nervous temperament, of a melancholy disposition, unacquainted with every thing but the service, flying society, and giving himself up to solitary pleasures, had seen his brother perish in Egypt, in consequence of traumatic tetanus. From the time of his return to France, he remains attached to the military service. The death of his father, together with some domestic trials, render him more gloomy for a year. About the month of March, 1801, whilst exercising, he experiences a peculiar disturbance in his stomach, and since that period, he has never ceased to complain of the epigastric region. He grows lean, and becomes feeble. He believes that his lungs are affected, and employs several remedies.

July 27th. Being at the military hospital, he remains for twenty-four hours, sitting upon his hams in bed, unwilling to leave it. At six o'clock on the following morning, he deceives the overseers and sentinels of the hospital, and, clothed with a single garment runs through the streets, drinks a glass of brandy, betakes himself to the house of a cousin, and is there very delirious. Two days afterwards, feeling very thirsty, he drinks ten bottles of wine, in which he dissolves several pounds of sugar. He vomits abundantly, but still drinks. His servant tries to prevent it, but this is not done without danger. In the evening, he experiences great prostration, and during the night suffers from convulsions, when his urine is discharged involuntarily. His thirst is most urgent. On the following day, the delirium is continued and general. He spits at every one, often becomes furious, and thinks that every thing offered him is poisoned.

Aug. 20th. I visit the patient, who is at the Guard hospital. I find him bound to his bed, surrounded by his comrades, pale, extremely emaciated, his eyes glazed, the muscles of his face wan, and his breath exhaling a fetid odor. I cause him to be unbound, and he consents to enter a carriage with me alone. The open air composes him, and he is rational. Having been introduced to his new habitation, he sleeps for several hours. On waking, there is redness of the cheeks, his eyes are fixed, and his physiognomy sad. "I could die for him; I must see him; if he sees me, every thing is saved; he is God, my father; my mother! he has chosen my mother for his wife. In the name of the Father and of the Son and of the Holy Ghost. So may it be." These phrases are blended together, during seasons of repose, when the patient seeks for words, and repeats them very rapidly, as if after a great effort of memory. He often makes the sign of the cross, pronouncing the words, "*In the name*," etc., in a slow and solemn manner. The pupils are dilated, and the urine flows involuntarily. Perspiration is general, limbs rigid, pulse feeble and subsultus tendinum. Lotions of cold water to the head, and sinapisms. 21st. A remission, attended with a general sense of feebleness. He seeks every where for his father and mother. There is tetanic rigidity. Signs of the cross are constant, and he entertains solicitude respecting his life. At evening he has an appetite, and a remission of his malady. The patient sees 20,000 men pass, on horseback, borne upon clouds, to the conquest of England. During the night, there is tetanic rigidity, and an expression of alarm upon his countenance. The patient believes that he sees devils, from which he tries to rid himself by signs of the cross, and blows of his fists which he

*Sibbern. in *Collect. Soc. Med.* Havn. I, no. II.

makes in the air. 23d. From seven o'clock in the morning, there is tetanic rigidity; his eyes are fixed, and the pupils dilated. There is perspiration, slow pulse, and insensibility when the skin is pinched. The visit of a comrade causes the tears to flow. Alcoholic frictions are employed, a blister to the neck, and sinapisms to the feet. 24th. Same delirium, complaints of the patient as to what he is caused to suffer; tetanic rigidity diminished. Vesicatory discharges abundantly. 25th. Bath, followed by sleep. The sight of his sister afforded him the sincerest pleasure, but after his first greetings, he sinks into a profound sleep. All the articulations of the fingers, upon which blisters were formed day before yesterday, are in a state of suppuration. 27th. The patient is stronger, and desires to be left to take care of himself. 28th. He affronts his sister, and is at times delirious. Gayety and sadness alternate. Sleep.

Sept. 4th. We open a blister under the heel, formed by the sinapism on the 23d of Aug.; an operation which the patient was unwilling to permit. The serum which is poured forth, exhales an exceedingly fetid odor. A few drops of it fell upon one of my fingers, causing a whitlow, which it was necessary to open with an instrument. 5th. A complete remission, together with a bath. 6th. Abundant stools, bleeding at the nose, and perspiration. The wound upon the heel is of an unhealthy character. New blisters form upon all the fingers. 17th. Same state continues; severe and continued pains at the epigastrium. 27th. The blisters of the fingers dry up successively. The wound beneath the heel improves. Milk, chocolate, tonics.

Oct. 2d. Cicatrization of the wound of the heel. Since this period, although the patient makes a visit to his relatives and friends, and walks much, he becomes sad, uneasy, impatient. Nothing diverts him, and he says he suffers greatly. 11th. His emotions are variable. There is alternately, gayety and sadness, discouragement and bitter complaints. We apply a blister to the arm, and administer purgative drinks during several days. Stools abundant. 13th. Restoration to health. It is remarkable, that during the suppuration of the vesicatory, the patient improved daily. 23d. This young officer leaves for his family in the country, and a few days afterwards, there was a suppression of the vesicatory. His health immediately suffers, and an issue is established. M. C. at length returns to his service, from which he retires a year subsequently, at the solicitation of his relatives, in the enjoyment of good health.

A lady, forty years of age, becomes a maniac, and remained so for a year. After an intermission, she had another attack, which persisted for a year; and so on, for twenty years. At the time of the cessation of the menses, a cancer appears on the right breast, and at the age of sixty years the tumor is extirpated. An attack recurs, without affecting the tendency of the wound towards cicatrization, which took place six weeks after the operation. When the wound had cicatrized, the attack which usually lasted a year, ceased entirely, and very speedily, having continued only six months; and has not again returned. For seven years, this woman has enjoyed perfect health.*

Mary Ann Frances F., nineteen years of age, of a nervous temperament, medium stature, light hair, black eyes, light complexion, and a moderately full habit, was born of an insane mother. At seven years of age, she has variola, at twelve tinea capitis, at thirteen psora, at fourteen, the menses, preceded by an eruption on the head. Since the turns have been abundant, she has had frequent attacks of headache. At the age of sixteen years, she imagined that every one was watching her movements, but this painful idea was promptly dissipated. Married at the age of eighteen, she had at nineteen a happy confinement. She desired to nurse her infant, but at the earliest period of

* Lafontaine.

lactation, committed errors in regimen. She was unwilling to remain covered, saying, she was too warm, etc. The conformation of the nipples not being favorable for nursing, she experienced much pain whilst the child was at the breast, which occasioned great disorder of thought. On the fourth day, she ceases to nurse, and her breasts are excessively distended with milk. On the fifth, she drinks cold water, and washes herself in it. The lochia cease, and the delirium increases. She complains of an insupportable heat. They cannot bleed her. She pinches and bruises her breasts without appearing to suffer. On the fourteenth day, leeches are applied to the vulva, mustard to the thighs, and two blisters to the legs. On the sixteenth day, leeches are applied behind the ears, sinapisms anew, ethereal potions, etc. All these means were employed without success. On the 25th Feb., she is brought to La Charité, and after remaining there four days, is transferred to the Salpêtrière. On her arrival, the delirium is general, the breasts are very hard, and the patient refuses to remain covered. She is, without cause, tormented with fear, mistaking persons who approach her, for gentlemen of her acquaintance.

March 5th, a milk abscess forms in the right breast, which was previously very hard and of a violet color. An abundant discharge of sanious matter takes place, yet the delirium continues, and the patient will allow no apparel to be put upon her. April 10th, the opening in the breast tends to cicatrization, the delirium lessens, and the patient regards the advice that is given her. Laxative drinks. May 1st. Progressive return of the vital forces, and reason. Sees her husband and parents: is more calm and rational. May 12th. Entire convalescence, and complete cicatrization of the abscess. 15th, reason is wholly restored. On the 27th, our convalescent is discharged cured.

We have had at the Salpêtrière a woman, thirty-five years of age, who was affected with a monomaniacal delirium, attended with excessive mobility. She had a cancer in a state of ulceration on the left breast, showed it to every one, and would wear no apparel. The surgeon-in-chief of the hospital, Professor Lallemand, extirpated the breast; an operation which the patient bore with great fortitude. From that moment, she was more composed, and willingly submitted to the employment of dressings. Although enormous, the wound healed rapidly; and cicatrization and the reëstablishment of reason were simultaneous.

A woman forty-five years of age, had for three years, an ulcer upon the leg. They heal the sore, and she immediately becomes a maniac, and suffers somewhat from difficulty of articulation. She is brought to the Salpêtrière. The ulcer is reopened, and reason restored. Similar facts have been presented to my notice, seven or eight times at least, in the course of my practice.

We have in the division for the insane at the Salpêtrière, a woman forty-six years of age, affected with an attack of mania without fury, which was induced by a thunder-clap. This attack terminated in an engorgement of the submaxillary glands of the right side. The patient then fell into a stupor, attended with an inability to articulate sounds. The use of mercury internally, and friction to the tumor, dissipated the engorgement. This woman recovered her reason, in proportion as the glands were emptied, and at length, became sane. But scarcely had she returned home, than she experienced domestic mortifications and distress, and relapsed into a state of stupor and paralysis. The glands were engorged anew, and since they have been relieved a second time, the patient is better.

Elizabeth C., sixty-four years of age, of much constitutional vigor, and very active for one of her age, has always enjoyed excellent health. She never experienced any menstrual disorder, and had four fortunate confinements. One of her sons went to Spain during the last war. Having received no intelligence respecting him, she thought she recognized him one day among a company of soldiers, and followed this company from the suburb St. Antoine,

to the environs of the barrier Fontainebleau. We know not precisely what happened on the way, but she was taken by the police, on the following day, running naked through the streets and public places. She is brought to the Salpêtrière, in a state of agitation extraordinary for a person of her age. This condition lasts for six weeks without any remission ; when at length, the parotid of the left side becomes developed. The delirium is immediately assuaged. The repeated application of leeches to the tumor, reduced its inflammation. However, an abscess forms, which is opened and cured in the course of about three weeks. Ever since the enlargement of the parotid commenced, the delirium has gradually lessened, and finally disappeared before the cicatrization of the wound, formed by the opening of the abscess. At this time, June 24th, the patient leaves the hospital perfectly restored.

Sputation is a very remarkable symptom among the insane. It often announces the explosion of an attack, and sometimes persists during the whole period of the malady. There are insane persons who make all the efforts and movements of one who desires to spit, though they are unable to accomplish the act. This desire seems to result from an obstruction of the throat, or a constriction of the salivary glands. Salivation is sometimes very abundant, even among very meagre subjects. Certain German authors assert, that this symptom is the sign of an affection of the liver ; but I have never been able to demonstrate this fact. Salivation is the effect of atony and paralysis in the case of individuals who are in a state of dementia, and who allow a great amount of mucus to flow from the mouth, unperceived by them. Abundant salivation sometimes terminates insanity. When the insane are phthisical, if spitting is suppressed, the delirium increases, and excitement or sadness is more considerable. When the spitting is abundant, there is a remission of insanity. The skin performs its functions imperfectly in insanity, and therefore, the reëstablishment of the transpiration concurs, more frequently than is supposed, in the cure of the insane. Is it not to this cause that we are to attribute many cures in spring, and the good effects of tepid and vapor baths, together with mucilaginous drinks? Perspiration sometimes terminates insanity. This termination is more rarely observed, on account of the agitation of the patient, but is frequent. Do not the heats of summer, by provoking abundant sweats, favor the cures of autumn? By means of these, in connection with the vapor bath, I have cured some insane persons. Tears, which perform an important part in the *nervous* disorders of women, also terminate insanity.

A lady, thirty-four years of age, of a lymphatic temperament and nervous constitution, and of a mild and timid disposition, has always enjoyed good health, although the menstrual flux is not regular. For some months she takes care of a lady whom she tenderly loves. She labors day and night, and watches for fifteen nights in succession. Whilst greatly and constantly troubled, through fear of seeing her friend perish, she learns that her lover has fought a duel, and been wounded. After concealing her despair for some hours, she becomes delirious, and reveals her secret. They bleed her, and prescribe foot-baths and diluent drinks. After fifteen days, the violence and agitation are subdued. The patient is conscious that during her delirium, she has revealed the secrets of her heart. From this period, she believes herself despised by every one, detested by her husband, and destined to some punishment. She desires to die. Five days are spent in vain solicitations to induce her to take some aliment, and for eight days, she takes but a few swallows of broth. She is committed to my care. The countenance of the patient is pale, the lips brownish, eyes dull, the physiognomy expressive of pain, and the movements slow. At times, she heaves a profound sigh, her breath is fetid, and she suffers from constipation. On the day after her admission, I place with the patient, beside the women who serve her, a young lady of an

agreeable exterior, mild and engaging, who converses at first, with an air of indifference, then with an accent of benevolence and friendship, and at length, commits to her certain confidential matters, and invites our patient to unfold her feelings. After twenty-four hours of gentle and adroit perseverance, the patient takes the hand of her new friend, sheds a torrent of tears, and then reveals all the secrets of her heart; pointing out the cause of her delirium, the motive that induced her to resolve to eat no more, in fine, the fears that harass her. She decides also, to take some nourishment. On the day following, there is a new struggle against her notions, resolutions and fears; a new crisis, a new effusion of tears, and progress towards convalescence. After three weeks the cure is completed, on my assuring the patient that nothing that she had said was believed, but had been attributed to her delirium.

This crisis, which we often observe in hysteria, is more frequent among melancholics than maniacs. I remarked, page 58, that insanity is terminated by the spontaneous vomiting of mucous matters, yellow and brownish. These terminations are so frequent, and so commonly useful, that they have served as a guide to practitioners who, wishing to imitate nature, and follow her tendencies, have, at all times, made use of emetics. I have averted, so to speak, attacks of insanity, by giving emetics, and prevented threatening relapses, by the administration of even drastic purgatives. These therapeutic agents are not always employed to unload the alimentary canal. Their action is sometimes perturbating. It overcomes the spasm of the intestines, or determines a revulsive irritation, which is in some cases salutary. Insanity is sometimes terminated by coition, and even onanism; although these two causes often produce this malady, which then passes speedily into dementia. Every body knows the history of M. Bl., rector of Réole, related by himself. This patient, who was strong, robust, and in the flower of his age, consecrated both by occupation and principle to the severest continence, becomes a maniac, and is cured at the expiration of six months, after a very abundant and spontaneous spermatic evacuation.*

We have often seen girls, and young widows, cured by marriage. Alexander Benoêt states, that a maniac, escaping from her house, entered a lodging room, where she was subjected to the brutality of 15 individuals. Her menses, which had been suppressed, were reëstablished, and the patient was cured. I understand, from a physician who has charge of the insane at Stockholm, that a young maniac, having escaped from his cell, enters the habitation of a young woman who is insane; and that, after having given themselves up during the night, to the wildest venereal transports, the former was found on the following morning dead, and the latter cured. I have never had occasion to observe similar crises in mania; but have sometimes known marriage to cure hysterical melancholy I have had charge of three girls who, after attacks of mania, remained a long time sad, gloomy and inactive; and who recovered the plenitude of their health only after marriage. We must also take notice of moral influences. Pregnancy, confinement and nursing, are means which nature sometimes employs, to terminate insanity. I believe these terminations are rare. I have often noticed, that pregnancy and confinements changed the delirium in no respect, but rendered maniacs more composed. I have also known one lady who, during five consecutive pregnancies, became insane, and was cured in every instance by confinement.† Notwithstanding these examples, and many others cited by numerous authors; and the opinion of many physicians, I regard as exceptions, the cures of insanity by marriage, preg-

* Buffon. Hist. of Man.—Ch. Londe, art. *Satyriasis*, of the Dic. of Practical Medicine and Surgery, t. xiv, p. 527.—Leuret, Psyc. Fragments on Insanity: art. Passive Inspiration, p. 282.

† An ephemeris of curious things in nature.

nancy and confinement; so often have I seen it persist, and even aggravated, by these means. Let one visit the Salpêtrière, and he will there find more than one hundred insane women, although they have been married, pregnant and confined.

As the natural secretions may become the causes and crises of insanity, so those of a morbid character, may both produce and terminate this malady.

M. de F., seventeen years of age, of a robust constitution and great strength, of a yielding disposition, and addicted to the pleasures of his age, contracts a gonorrhœa, and is treated with the liquor of Van-Swieten. One night, being tormented by thirst and want of sleep, he takes a bottle of the pure liquor that was standing upon his table, drinks of it, and persuades himself that they wish to poison him. He becomes furious, is cured at the expiration of three months, and becomes a soldier. Being in the army during the campaign in Prussia, (then twenty-four years of age), he gives himself up to all the excesses to which his new condition exposes him. He contracts a gonorrhœa, and his comrades advise him, in order to cure it, to drink a large tumbler of brandy, in which they had steeped the powder of three cartridges. The gonorrhœa disappeared. The patient however begins to be delirious, yields himself to new excesses, and arrives in France with his regiment. The fury and delirium augment. Not recognizing his superiors and comrades, he commits all sorts of extravagances at his quarters, and is committed to my care in the month of May, 1807. This young officer is tall, his hair black, harsh and abundant, his breath fetid, and his tongue very white. His features are shrunken, face pale, and the cheeks flushed. His eyes glisten, emaciation is considerable, and there is fury, attended with a desire to rend. His delirium is general. Now, the patient believes he sees in the clouds a body of 40 or 50,000 men, which the emperor reviews; now, he thinks himself in an enchanted place, and destined to figure in great events; becoming proud and arrogant. He often sees, through a little opening in the ceiling of his chamber, immense regions inhabited by beings who are extremely happy, and who come and arrange themselves around it, to pay court to him. He regards his attendant as the god of the infernal regions; and whenever he sees him shut a door, he thinks that the gates of Erebus are forever closed upon him. Another is his guardian angel, who is often overcome by the god of hell. His sleep is a long time troubled by the sight of a skeleton, which rises from the floor to the ceiling of his chamber, and upon which my patient throws himself with fury, uttering loud cries, to rid himself of this unwelcome visitor. He tears the coverings of his bed, his mattress and straw bed. He sometimes happens to sleep quite naked upon the straw, and on being pricked by it, imagines that the extremity of every stalk is the beak of an eagle which is going to devour him. He then makes upon the floor a clean, circular place, around which he arranges the straw, and the remains of whatever he has torn in pieces or broken; places himself in the centre of this circle, and moving his head, with extreme rapidity from right to left, passes the whole night in blowing, to protect himself from the attacks of these eagles. This insomnia, together with the apprehensions which maintain it, persists for fifteen nights. After having passed six months, in a state of fury which nothing can calm, either night or day, he gives himself up to the practice of masturbation, to a frightful extent, for fifteen days. Representations of its effects, and threats, are of no avail. At length, the patient becomes frightened at the dangers that may happen from a continuance of these ruinous practices. He is more composed, yet we observe that his linen is still soiled. The gonorrhœa has reappeared, and I favor this discharge by all possible means. By slow degrees, the patient becomes more calm and tranquil, and more accessible to the councils of reason. It is at about the eighth month, that we began to regard him as fairly convalescent. There still remains some confusion of ideas, uneasiness, preju-

dices, and an apathy difficult to overcome. I oblige him to occupy his mind, and to go abroad with a convalescent like himself. He is immediately seized with another attack of gonorrhœa, which lasted more than three months. Since that time, he has been well. Two years afterwards, he suffers from a third attack of gonorrhœa, which he suppresses, and the inguinal glands become engorged. He loses his reason, and throws himself from a third story, not for the purpose of destroying himself, but under the influence of an *illusion*. The noise which he makes, draws together a crowd of people in the court of the hotel, where he stops. Persuading himself that it is a body of the enemy, he mounts his horse upon the balcony of his chamber, and exclaims with the tone of a commander; *charge*, *forward*. He advances suddenly, falls upon the pavement, and escapes with some contusions. The glands suppurate abundantly, and after a month, during which the delirium progressively diminishes, M. de F. is quite rational.

Physicians have observed that the pain of the first dentition, causes St. Vitus' dance. Among subjects of a lymphatic and nervous temperament, it sometimes becomes also, the cause of insanity. The appearance of the teeth through the gums, causes all the symptoms to cease. I have observed this, in the case of three young women. They have convulsions, bloating of the face, discharge much saliva, and often raise their hands to the mouth. They complain of great pain in the head and jaw. I could not be deceived respecting the cause of this malady, in the first of the three patients. The delirium ceases at the expiration of a month; and two teeth had pierced their envelopes. Fifteen days afterwards, mania reappeared with the same intensity. The gums of the late teeth were swollen and very red. The attack lasted several months and ceased only on the appearance of the teeth.

[I cannot refrain from referring in this place to the remarks of Doctor Marshall Hall on this important subject (dentition), and quoting from the Lancet of May 18th, 1844, a paragraph from his pen. Though they refer especially to children, the cases before us show, that they are, sometimes at least, applicable to those who are rapidly approaching, if they have not already reached the period of maturity. "Like other physiological processes," he observes, "it is apt to become, from its very character of energy, pathological, or of morbid activity. It is obviously then, attended with extreme suffering to the patient; the brain is irritable, and the child is restless and cross; the gums are tumid and heated; there is fever, an affection of the general vascular system, and there are too frequently, convulsions of various degrees and kinds, manifested in the muscles that move the eyeball, the thumb and finger, the toes; the larynx, the parietes of the respiratory cavities; and the limbs and frame in general, affections of the excito-motor part of the nervous system, and of the secretions of the liver, kidneys and intestines, affections of the ganglionic division of that system."]

Perhaps I ought to have incised them, although this would have been by no means easy; the patient being very much agitated, and believing that we wished to assassinate her.

[The reason assigned by our author for not performing immediately the operation strongly urged by Dr. Hall, viz., incising the gums, repeatedly if necessary, is one that strikes us as puerile, unless perhaps, it may be attributed to extreme sensibility and benevolence of heart. I should not however, have referred to this point, had I not elsewhere observed a want of the same qualities of firmness and resolution in administering food, at times when the patient stood in imminent danger of complete and fatal exhaustion. God forbid that I should recommend a measure, however trifling its character, that would cause a patient alarm, or indeed any degree of apprehension, without a corresponding or far greater good. Yet to permit him to starve, or a paroxysm of mania to

continue for months, when the use of the stomach pump in the one case, and the gum lancet in the other, might have prevented these grave issues, is not humanity, but a childish weakness.]

I shall close this article with the following case, extracted from the *Giornale delle Scienze Medicale di Napoli*, by M. de Renzi. A maniac, thirty-three years of age, of a bilious temperament and strong constitution, had an enormous tumor on the nates of the left side, extending even to the anus. It was opened with a sharp instrument, and discharged a great quantity of fetid matter. The wound was dressed with cerate and an emollient cataplasm. Gangrene appeared, and the dressing was made with storax. The patient was put upon the use of lemonade. During the suppuration, the attacks of fury were less frequent, and some signs of returning reason were observed. When the eschar was removed, a fistula in ano was found to exist, and was treated methodically. In proportion as the ulcer cicatrized, the reason of the patient improved. The cicatrization of the fistula was complete in forty-five days after the operation. Reason was reëstablished March 2d, 1835. This patient was admitted into the hospital for the insane at Palermo, Dec. 19th, 1834.

Such is an enumeration of the most remarkable physical crises of insanity. I could have multiplied the details, have added a greater number of examples, and hazarded some explanations; but I have limited myself to unfolding those practical results which are justified by the testimony of authors. We may arrange the crises of insanity in the following order; fevers, hemorrhages, gastric phlegmasiæ, cutaneous affections, and those of the lymphatic system. It is the duty of the practitioner, to distinguish the different tendencies of nature, and to second them according to the precept of Hippocrates. We have seen insanity terminated after a fall upon the head, by poisoning, by the cutting of the hair, by the operation for cataract, and by castration. Doctor Zützin, a physician at Bamberg, observed that three attacks of mania were terminated by plica; and by appropriate treatment, prevented for seven years, the return of the attacks. These however, are facts rather curious than useful, which are isolated, and can never furnish any therapeutic view, nor guide the physician in the treatment of mental alienation.

LYPEMANIA OR MELANCHOLY.

Definition of term, both ancient and modern, with remarks.—No advancement in science or the arts, which has not served as a cause of mental disease.—Monomania has its seat in the heart of man.—A disease especially of civilization.—Modified by state of society.—Illustrations.—Tristimania of Rush, lypemania or melancholy of Esquirol.—Views of the ancients respecting melancholy.—Symptoms of lypemania or melancholy.—Description of the person of a lypemaniac.—Cases.—Great torpor of the secretions.—Aversion to food.—Loss of rest in consequence of hallucinations and illusions.—Dreams terrify many.—Secretions become greatly disordered.—Urine.—General description of the emotions of the lypemaniac.—Modifying influence of the passions on the mind.—Causes of lypemania.—Seasons and climates.—Spring and summer produce the greatest number of lypemaniacs.—*Table illustrative.*—Spring most favorable to the cure of lypemania.—Age.—Childhood.—Adolescence.—Maturity.—Old age.—*Table of ages.* Sex.—Temperaments.—Professions and mode of life.—*Table of causes.*—Lypemania is continued, remittent, or intermittent.—Remittent form most common.—Crises very numerous.—Diseases which cause the death of lypemaniacs.—Post-mortem examinations.—Most frequent termination, phthisis pulmonalis.—Pathological anatomy has taught us nothing positive, respecting the seat of melancholy.—*Table of diseases to which lypemaniacs succumb.*—Displacement of the transverse colon frequent.—Interesting case and post-mortem examination.—Other cases with autopsies.—*Table of the pathological lesions found in the post-mortem examination of one hundred and sixty-eight cases of lypemania.*—Treatment of lypemania.—It may be hygienic, moral or pharmaceutic.—Influence of atmosphere on health and disease.—Case, reported in the language of the sufferer, together with the advice given.—Clothing.—Food.—Exercise both of body and mind recommended and enforced.—Isolation.—Tepid baths.—Continence and sexual intercourse.—The passions.—Fear.—Superstition.—Love.—Means used to break the chain of morbid feelings.—Examples.—Music.—Physical treatment.—Laxatives, and at the commencement of an attack, emetics and emeto-cathartics.—Tartrate of Antimony and Potassa with drastics, to be employed under certain circumstances.—The rotatory machine.—Blood-letting, local and general.—Baths; tepid, vapor and cold.—Affusions.—Douche.—Internal exhibition of cold water.—Opium.—Magnetism.—Closing remarks.—(*Farther remarks on treatment.*)

Writers, since the time of Hippocrates, have denominated that form of delirium which is characterized by moroseness, fear, and prolonged sadness, Melancholy. The appellation, melancholy, has been given to this variety of insanity, according to Galen, because the depressing moral affections depend upon a depraved condition of the bile, which, having become black, obscures

the animal spirits and produces delirium. Some moderns have given a more extended signification to the word melancholy, and have called melancholic, every form of *partial* delirium, when chronic, and unattended by fever. It is certain that the word melancholy, even according to the acceptation of it among the ancients, often presents to the mind a false idea; for melancholy does not always depend upon the bile. Nor would this signification be suited to it, as the moderns define it. This double consideration, has caused me to propose the word *monomania;* (derived from μονος, alone, and μανια, mania;) a term which expresses the essential character of that form of insanity, in which the delirium is partial, permanent, gay or sad. This generally received definition is now adopted by the greater number of physicians, and is established in our language.* The word melancholy, employed in the language of common life to express that habitual state of sadness from which some people suffer, should be left exclusively to moralists and poets, who, in their expressions, are not obliged to employ so much precision as physicians. Its signification should be limited to the temperament in which the hepatic system predominates, and to designate the disposition to a fixedness of ideas, and sadness; while the word monomania, expresses an anormal condition of the physical or moral sensibility, with a circumscribed and fixed delirium.

Monomania is of all maladies, that which presents to the observer, phenomena the most strange and varied, and which offers, for our consideration, subjects the most numerous and profound. It embraces all the mysterious anomalies of sensibility, all the phenomena of the human understanding, all the consequences of the perversion of our natural inclinations, and all the errors of our passions. He who is profoundly versed in whatever relates to monomania, cannot be a stranger to that knowledge which relates to the progress and course of the human mind. It is also, in direct relation in point of frequency, with the development of the intellectual faculties. The more the understanding is developed, and the more active the brain becomes, the more is monomania to be feared. There has been no advancement in the sciences, no invention in the arts, nor any important innovation, which has not served as a cause of monomania, or lent to it, its peculiar character. The same is true of the prevailing notions, general errors, and universal convictions, whether true or false, which impress a peculiar feature upon each period of social life. Monomania is essentially a disease of the sensibility. It reposes altogether upon the affections, and its study is inseparable from a knowledge of the passions. Its seat is in the heart of man, and it is there that we must search for it, in order to possess ourselves of all its peculiarities. How many are the cases of monomania, caused by thwarted love, by fear, vanity, wounded self-love, or disappointed ambition! This malady presents all the signs which characterize the passions. The delirium of monomaniacs is exclusive, fixed and permanent, like the ideas of a passionate man. Like the passions, monomania now manifests itself by joy, contentment, gayety, exaltation of the faculties, boldness, and transports of feeling; now, it is concentrated, sad, silent, timid and fearful; but always exclusive and obstinate.

It has long been said, that insanity is a disease of civilization; it would have been more correct to have said this respecting monomania. Monomania is indeed frequent in proportion to the advancement of civilization. It borrows its chararter, and finds again the causes which produce it, in the different periods of society. It is superstitious and erotic in the infancy of society, as it is also, in the countries and regions where civilization and its excesses have made little progress; whilst in an advanced state of society, its cause and character manifest themselves in, and depend upon, pride, scep-

* This word has been admitted into the Dictionary of the French Academy, edition of 1835.

ticism, ambition, the passion for gaming, despair and suicide. There has been no social epoch, which has not been remarkable, in consequence of some indications which monomania furnishes, of the intellectual and moral character of each.

The state of modern society has modified the causes and character of monomania, and this malady now reveals itself under new forms. With the weakening of religious convictions, demonomania, and forms of insanity depending upon superstition, have also disappeared. The influence of religion over the conduct of people being lessened, governments, in order to maintain authority over men, have had recourse to a police. Since that period, it is the police that troubles feeble imaginations, and establishments for the insane are peopled with monomaniacs who, fearing this authority, are delirious respecting the influence which it exercises, and by which they think themselves pursued. This monomaniac, who would formerly have been delirious with respect to magic, sorcery and the infernal regions; is now delirious, thinking himself threatened, pursued, and ready to be incarcerated by the agents of the police. Our political convulsions, in France, have been the occasion of much monomania, which has been provoked and characterized by events which have signalized each epoch of our revolution.

To the facts stated at page 17, I will add the following: In 1791, there were at Versailles, a prodigious number of suicides. Pinel states, that an admirer of Danton, having heard him accused, became insane, and was sent to the Bicêtre. At the death of the king and his unfortunate family, much monomania immediately made its appearance. The trial of Moreau, and the death of the duke d'Enghien, produced much of it. When the pope visited France, this great event awoke anew religious ideas, and there was then much superstitious monomania, which disappeared immediately. At that epoch, when the emperor peopled Europe with new kings, there were in France many monomaniacs who thought themselves emperors or kings, empresses or queens. The Spanish war, the conscription, our conquests and reverses, produced also, their mental maladies. How many persons, stricken with terror at the time of the two invasions, remained monomaniacs! Indeed, we now find in madhouses, many persons who consider themselves dauphins of France, and destined to the throne. Many cases, which we may read in this work, will confirm this general truth; that the state of society exercises a striking influence over the production and character of monomania. The profound study of this disease, allies itself to an acquaintance with the morals and habits of every people. The gymnosophists destroyed themselves in consequence of their contempt of death; the stoics through pride, and the Japanese through love of virtue. Monomania took the form of superstition among the Jews as it exists at this day in Spain, and in every country in Europe where indifference and incredulity with respect to ancient forms of belief, left minds to the influence of the religious sentiment; from whence spring ideas the most strange and absurd. We observe the same in England and Germany, among the jealous members of the various sects, which are multiplying almost to infinity. This observation has been made by all English and German physicians, who have written upon mental diseases. Monomania was erotic in Greece, as it now is in Italy. The habit of being always on horseback, rendering the Scythians impotent, they thought that their sex had been changed. In some countries they fear the black devil; in others the white. There, monomaniacs consider themselves bewitched, or wolf-men; here they fear magicians and sorcerers. On the sea-coast, they fear shipwrecks and tempests. These forms of insanity still exist, among certain people in the extreme north.

Such are the general considerations which appertain to every variety of monomania, and to all the forms of partial delirium that are permanent, and unattended by fever. But this malady presents itself under two opposite forms.

The ancients, who had adduced as characteristics of melancholy, sadness and fear; were obliged to rank among melancholics certain cases of partial delirium, which were maintained by an extreme exaltation of the imagination, or by passions of a gay and sprightly character. Lorry, who has so well described melancholy, although his definition of it accords with the view entertained by the ancients, admits a variety of melancholy complicated with mania, which is indicated by a partial delirium, attended by exaltation of the imagination, or an exciting passion. Rush* divides melancholy into two forms; that in which sadness predominates, which he calls *tristimania;* and that in which the opposite emotion prevails, which he denominates, *amenomania;* thus confirming the results of an observation which every one may make. Monomania, characterized by a passion either gay or sad, exciting or depressing, and producing a fixed and permanent delirium, attended also by desires and determinations depending upon the character of the prevailing passion, is naturally divided into monomania properly so called, which is indicated by a partial delirium, and a gay or exciting passion; and into monomania which is signalized by a partial delirium, attended by a sad or depressing passion. The first of these affections corresponds with maniacal melancholy, maniacal fury, or with melancholy complicated with mania; in fine, with *amenomania.* I give to it the name of monomania, and shall speak of it hereafter. The second corresponds with the melancholy of the ancients, the *tristimania* of Rush, and the melancholy with delirium, of Pinel. Notwithstanding the fear of being accused of neologism, I give it the name of *lypemania,* a word formed from λυπεω *tristitiam infero, anxium reddo,* and μανια, mania. We shall treat of lypemania in this article, employing indifferently, the words melancholy or lypemania, believing that custom has consecrated the latter appellation.

Hippocrates designates, as the characters of melancholy, sadness, or prolonged fear, without speaking of delirium. Areteus gives to mania the appellation of melancholy, so soon as fury is present. Galen adopts and enlarges upon this point, as well as upon many other ideas of Hippocrates. Cœlius Aurelianus does not distinguish melancholy from hypochondria, and relates several very interesting cases of partial delirium. Almost all authors who have succeeded them, have only copied, or arranged in their own way, the ideas advanced by Galen. Rhazes pretends, that the black bile, flowing from the spleen into the stomach, produces melancholy. Michaëlis of Hereda, and Forestus, believe that ideas of a depressing character, and fear, unite with partial delirium, to form the distinctive character of melancholy. Sennert admits an occult, or obscure condition of the animal spirits, in melancholy: Sydenham confounds hysteria with hypochondria, and the latter with melancholy. Ettmuller distinguishes delirium from melancholy; the former, in his opinion, succeeding the affection of melancholy. Frederic Hoffmann and Boerhaäve, regard melancholy as the first degree of mania. Sauvages defines melancholy to be an exclusive delirium, without fury, and complicated with a chronic disease. Lorry adopts the definition and theories of the ancients, but divides melancholy into three varieties; one depending upon a material cause, one having no such dependence, and a third mixed. Cullen very clearly distinguishes melancholy from hypochondria. In the latter, dyspepsia is present, and the delirium relates to the health of the patient. Pinel characterizes melancholy, by sadness and fear, with partial delirium concentrated upon a single object, or a particular series of objects. Moreau de la Sarthe confines himself to the definition of the ancients, and designates this form of madness by the title of melancholy with delirium. My honorable friend, Dr. Louyer-

*Med. Enquiries and Observations upon the Diseases of the Mind. Philadelphia, 1812, in 8vo.

Villermay,* has most clearly pointed out the difference which ought ever to distinguish hypochondria from melancholy. Melancholy consists in the permanent and exclusive impression of any object whatever, pursued with ardor, and almost always accompanied with fear, suspicion, etc. Such is the definition of melancholy which we read in the *Treatise on Delirium* of the respectable professor Fodéré. The same author gives the name of mania to melancholy, when the latter passes into the state of excitement or fury.

This hasty exposition, indicates the fluctuation and uncertainty of opinions respecting the characteristics and nature of this malady. We consider it well defined, by saying that melancholy with delirium, or lypemania, is a cerebral malady, characterized by partial, chronic delirium, without fever, and sustained by a passion of a sad, debilitating or oppressive character. Lypemania should not be confounded with mania, of which the delirium is general, with exaltation of the sensibility and intellectual faculties; nor with monomania, whose characteristic is, exclusiveness of ideas, with a gay and expansive passion. It should not also, be confounded with dementia, in which incoherence and confusion of ideas are the effect of weakness; nor with idiocy, for the idiot can never reason.

Lypemania has been so often taken for hypochondria, that I cannot forbear presenting, in few words, the differences which exist between these two maladies. Lypemania is more frequently hereditary. Lypemaniacs are born with a peculiar temperament, the melancholic, which disposes them to lypemania. This disposition is strengthened by vices of education, and by causes which act more directly upon the brain, the sensibility and intelligence. The causes which produce it, are usually moral; whilst hypochondria is generally the effect of physical causes, which modify the action of the stomach, and disturb the digestive functions. In lypemania, ideas contrary to reason, are fixed and sustained by a depressing passion, as well as a vicious association of ideas. In hypochondria on the contrary, there is no delirium, but the patient exaggerates his sufferings. He is constantly preoccupied and frightened at the dangers which he believes threaten his life: dyspepsia also, is present.

As in the other forms of insanity, I shall consider, with respect to lypemania or melancholy, the causes that produce it, the symptoms which characterize it, the course which is proper to it, its terminations and treatment.

SYMPTOMS OF LYPEMANIA OR MELANCHOLY.

In person, the lypemaniac is lean and slender, his hair is black, and the hue of his countenance pale and sallow. The surface over the cheek bones, is sometimes flushed, and the skin, brown, blackish, dry and scaly; whilst the nose is of a deep red color. The physiognomy is fixed and changeless; but the muscles of the face are in a state of convulsive tension, and express sadness, fear or terror; the eyes are motionless, and directed either towards the earth or to some distant point, and the look is askance, uneasy and suspicious. If the hands are not dried up, brown and earthy in their hue, they are swollen and livid.

Mad'lle C., twenty-three years of age, is brought to the Salpêtrière June 8th, 1812. In stature she is of medium size, her hair and eyes are black, the eyebrows very thick, and approximate closely at the root of the nose; her look is fixed upon the ground, her physiognomy expressive of fear, her habit of body lean, and her skin brown. We observe some scorbutic spots on the lower extremities. The hands and feet, always very cold, are of a purplish red; the pulse is slow, and very feeble: constipation, which is ordinarily very

* Treatise on Nervous Maladies or Vapors. Paris, 1816, 2 Vol., in 8vo.

obstinate, is sometimes replaced by a diarrhœa; secretion of urine scanty. She utters not a word, refuses every kind of movement, and persists obstinately in confining herself to bed. We have recourse to various means, to induce her to take nourishment. Affusions of cold water triumph over this repugnance, and she eats more readily. However, she manifests at times, her unwillingness to take nourishment, though with less obstinacy. For the four years that this woman has been in the house, but few words have escaped her, which, however, have indicated to us, that fear absorbed all her faculties. She formerly lived in the country, and had been excessively frightened by soldiers. We have to oblige her to leave her bed, when, so soon as dressed, she sits down upon a bench, always in the same place, her attitude remaining the same; her head inclined to the left side of the chest, the arms crossed, resting upon the knees, and her eyes turned fixedly towards the sun. She remains thus, without moving, or uttering a word during the whole day. At meal time, she does not go for her food, but it is necessary to bring it to her, and press her to partake of it. She never changes her position to do this, and uses only the arm and hand of the right side. If any one approaches the patient, or speaks to her; if they interrogate or exhort her; her countenance becomes slightly flushed, and sometimes she turns her eyes aside, but never speaks. It is necessary to inform her when it is time to retire; when she undresses, gathers herself up in bed, and envelopes her person entirely in the coverings. Menstruation is irregular and scanty; and is suppressed for six months. We never succeeded in overcoming the silence of this female, nor her aversion to motion. She never had an attack of fury, and died of phthisis at the age of twenty-nine years.

The following presents to us lypemania with different characters from those which we observed in the preceding case. In the latter, the lypemaniac seems to be overcome by the weight of the emotions that oppress her, whilst in the following case, the patient reveals by her look and attitude, the activity and fixedness of her mind and affections. Mad'lle W., tall, and of a remarkably strong constitution, had spent her infancy in the château of Chantilly, and had often sported with the duke d'Enghien, himself a child. At the period of the emigration, she was committed to a lady, who was charged to watch over her education. Political events became more serious. She experienced misfortunes, and her education was neglected. At the death of the duke d'Enghien, she falls into the most profound lypemania, and though only sixteen or seventeen years of age, her hair becomes almost immediately gray. She was sent to the Salpêtrière, where she survived many years. She was very tall and slender, her hair very abundant and gray, and her large blue eyes, motionless. She was pale, and clad simply in her chemise, with uncovered head; sat constantly upon the bolster of her bed, the thighs flexed upon the abdomen, and the legs upon the thighs. The elbows rested upon the knees, and the head, always elevated and turned to the right, was sustained by the right hand. During the night, the position of the patient is the same, but she sits upon the mattress, supporting her back against the bolster, and collecting the coverings about her chest. She never speaks, but from time to time murmurs in a very low tone, a few monosyllables, which lead us to believe that she sees and regards some one. She responds to no question, but repulses by a movement of the body, the person who interrogates her. She eats little, and constipation is obstinate. She moves about upon the nates, after the manner of cripples; raising her body by the aid of her hands. Her eyes and attention are never turned from a window which is near her bed, and through which, she seems to see or hear some one, who fixes her attention. The thighs and legs, by their long continued fixed condition, are contracted, and some attempts that have been made to extend them, have proved ineffectual.

Oneness of affection and thought, renders the actions of the melancholic

uniform and slow. He refuses indeed, all motion, and passes his days in solitude and idleness. He habitually sits with his hands crossed, or stands inactive, with them hanging by his side. If he walks, it is slowly, and with apprehension, as if he had some danger to shun; or with haste, and always in the same direction, as if his mind was profoundly occupied. Some, lacerate their hands and the ends of the fingers, and destroy the nails. Tormented with grief or fear, the eye and ear are incessantly on the watch. For the lypemaniac, day is without repose, and the night without sleep. The secretions are no longer performed. Some melancholics obstinately refuse all nourishment. We have seen them pass several days without food, although hungry; being restrained by hallucinations or illusions, which give birth to chimerical fears. One, fears poison, another, dishonor; the latter wishes to do penance, the former believes that if he eats, he shall compromise his relatives or friends; in fine, there are those, who hope to rid themselves of life and its torments, by abstinence from all nourishment. We have seen some of them sustain an abstinence of thirteen, twenty and more days' continuance. When we triumph over the repugnance of these patients to taking food, the greater part of them are less gloomy and sad. See *Suicide*. The pulse is ordinarily slow, feeble, and concentrated; sometimes it is very hard, and we feel under the fingers a sort of trembling of the artery. The skin is arid, and attended with a dry and burning heat. Transpiration has ceased, while the extremities of the limbs are bathed in sweat.

Lypemaniacs sleep little; inquietude and fear, terror, jealousy and hallucinations, keep them awake. If they grow drowsy, no sooner do their eyes close, than they see a thousand phantoms which terrify them. If they sleep, their rest is interrupted, and agitated by dreams of an inauspicious character. They are often aroused from sleep by the nightmare, or dreams which represent to them the objects which have caused, or continue their delirium. Some, after a favorable night, are more sad and uneasy. Others, think that they shall never reach the close of the day, and are better when night begins, persuaded that they cannot then be apprehended. Others still, think that their uneasiness augments at the approach of night. They dread obscurity, solitude, insomnia, the terrors of sleep, etc. The secretions also, present remarkable disorders among lypemaniacs. In some cases, the urine is abundant, clear, and limpid; in others, scanty, thick and turbid. There are melancholics who, from various motives, retain their urine for many days in succession. We know the history of one patient, who was unwilling to urinate, through fear of inundating the world; and who decided to do so, only after he had been persuaded that it was by this means alone, that a great conflagration, which had just broken out, could be extinguished.

Melancholy with delirium, or lypemania, presents in its symptoms when taken together, two striking differences. Those suffering from this calamity, now exhibit a remarkable susceptibility, attended with extreme mobility. Every thing produces a strong impression; the slightest cause produces the most painful effects. Events, the most simple and common, appear to them to be new and singular phenomena, prepared expressly to torment and injure them. Cold, heat, rain and wind, cause them to shudder with pain and fear. Noise impresses them painfully, and strikes them with terror. Silence causes them to start, and frightens them. If any thing displeases them, they repulse it with rudeness and obstinacy. If their food is not agreeable to them, their repugnance to it is so great, as to produce nausea and vomiting. Have they any ground for fear, they are terrified; have they any regrets, they are in despair; do they experience any reverses, they believe that all is lost. Every thing is forced and exaggerated in their mode of feeling, thinking and acting. This excessive susceptibility causes them to be constantly meeting, in external obects, with new causes of pain. Both day and night their ear is open for hear-

ing and their eye for seeing. They are constantly in motion, in search of their enemies, and the causes of their sufferings. They relate without ceasing, and to every one, the story of their ills, their fears, and despair. Again, the sensibility concentrated upon a single object, seems to have abandoned all the organs; the body is indifferent to every impression, while the mind no longer engages itself, except upon a single object, which absorbs all the attention, and suspends the exercise of all the intellectual functions. The immobility of the body, and the fixedness of the features, together with an obstinate silence, betray the painful conflict between the understanding and affections. It is no longer a pain that agitates the mind, that causes complaints, cries and tears; but an emotion which rather produces silence, shuts the fountain of tears, and is incapable of suffering. In this state of painful exaltation of the sensibility, not only are lypemaniacs inaccessible to every impression foreign to the object of their delusion, but they are also beyond the influence of reason, because they but imperfectly perceive impressions. An abyss, say they, separates them from the external world. I *hear*, I *see*, I *feel*, say many lypemaniacs, *but I am not as I formerly was. Objects do not come to me, do not identify themselves with my being; a thick cloud, a veil, changes the hue and aspect of bodies. The most polished substances appear to me to be bristling with asperities.* External objects, no longer sustaining their natural relations, grieve, astonish, and frighten them. They have illusions of the senses, and hallucinations. They associate ideas the most strange and unlike; from all which spring convictions more or less opposed to common sense, unjust prejudices, fear, fright, dread, awe and terror.

The passions modify the ideas belief and determinations of the most rational man. The depressing passions produce also a partial lesion of the understanding. The intellectual life of him whom a melancholic delirium controls, is altogether imbued with the character of his passion. The mountaineer cannot support a lengthened absence from the place of his nativity, ceases not to mourn, and at length pines away and dies, if he does not revisit the paternal roof. He who fears the police, or the pursuits of the tribunals, is filled with alarm and dread, and is in constant apprehension of an arrest. He sees every where agents of police, and servants of the magistracy, and that too, among his friends and relatives.

Antiochus dies, in despair of obtaining from Seleucus his father, the woman whom he adores. Ovid and Tasso, pass days and nights, in incessant agitation both of mind and heart, in consequence of the absence of the objects of their love. Fear, with all its shadows, whether the cause of it be real or imaginary, exercises the most general influence over melancholics. One who is superstitious, dreading the wrath of heaven, and the vengeance of the gods, is pursued by furies, thinks himself in the power of the devil, devoured by the flames of hell, and doomed to eternal punishment. Another, frightened by the injustice of governments, apprehends falling into the hands of the officers of the State, and of being conducted to the scaffold. He accuses himself of having committed the greatest crimes, for which he seeks to justify himself. He now prefers death to the agony of uncertainty, whilst at other times, he supplicates a delay in the execution of the punishment, from which nothing, in his opinion, can protect him. The latter, fears the treachery of men, and thinks that his secret enemies, the envious and wicked, threaten his fortune, his honor, his affections, and even life itself. The slightest noise or movement, the most insignificant sign, or trifling expression, cause him to start with fear, and persuade him that he is going to die by the machinations of his enemies. If a more substantial and liberal education sets a man above these superstitious terrors, or fears of a similar import; ingenious in self-torment, he finds the elements of grief and terror in his instructions and knowledge; and his disquietudes originate in matters pertaining to science. This lypemaniac

thinks that he is subjected to the deadly influence of electricity or magnetism, and persuades himself that by means of chemical agents he may be poisoned; or by certain occult instruments, physical science is preparing for him a thousand ills, hears whatever he utters, however great the distance, or even divines his thoughts. The remorse which sometimes succeeds to crimes of great magnitude, throws the guilty into a state of melancholy and characterizes their delirium. Orestes is pursued by furies. Pausanias the Lacedemonian, having slain a young female slave that had been presented to him, is tormented even to the day of his death, by a spirit which pursues him wherever he goes, and which resembles his victim. Theodoric, having caused the decapitation of Symmacus, believes that he sees the head of his victim in that of a fish which is served upon his table. The too noted Santerre, expects every instant to be seized by soldiers, who are to conduct him to punishment. Lypemaniacs frighten themselves, from motives the most strange and imaginary. Alexander de Tralles says, that he once saw a woman who dared not bend her thumb, lest the world should come to an end. Montanus speaks of a man, who imagined that the earth was covered with a shell of glass, under which were serpents, and he dared not walk, through fear of breaking the glass, and being devoured by them.

A general whom I had in charge, dared not go into the street, believing that all the passers-by, addressed him in terms of abuse or reproach.

Some lypemaniacs are constantly laboring under fear, and consume their lives, in constantly recurring solicitudes; whilst others are terrified by a vague sentiment, without any motive. *I fear*, say these patients, *I fear;* but wherefore? I know not, *yet I fear.* Their external appearance, their physiognomy, their actions and discourse, all indicate fear the most profound and poignant, from which they can neither relieve themselves, nor secure the ascendency. The delirium takes the character of the moral affection which engaged the mind of the patient before the outbreak of the disease, or preserves that of the cause that produced it; a fact which is especially noticeable when this cause acts promptly, and with great energy. A woman, in the course of a dispute is called a thief; she immediately persuades herself that every one accuses her of the same thing, and that all the agents of justice are in pursuit of her, to hand her over to the tribunals. A lady is frightened by robbers, who break into her house; from this time she never ceases to exclaim, the robber! Every man she sees, not excepting her own son, are brigands who are come to rob and assassinate her. On the slightest noise, she cries out, the robber! thinking that they are breaking open the door of her house. A merchant meets with some small losses. He immediately thinks himself ruined, reduced to the most complete indigence, and refuses to eat, because he has not wherewith to pay for his food. A statement of his affairs is presented him, which shows that he is in very prosperous circumstances. He examines, discusses it, and seems to be convinced of his error; but on the whole, concludes that he is ruined. Two brothers have a discussion respecting certain pecuniary affairs; when the one persuades himself that the other wishes to kill him, in order to enjoy his property. A soldier loses his grade, and becomes sad and thoughtful. He immediately considers himself disgraced, and persuades himself that his companions have impeached him; and is perpetually occupied in justifying his conduct, which has always been highly honorable. A woman sees her child thrown from a horse; after which no reasoning, and not even the sight of the child, who is well, can convince her that he is living.

In thus analysing all the ideas that torment lypemaniacs, we can readily refer them to some sad and debilitating passion. Could we not establish a good classification of lypemania, by taking as a basis, the different passions that modify and subjugate the understanding? Sometimes the moral senti-

ments of lypemaniacs not only preserve all their energy, but are exalted to the highest degree, although the patients themselves are lamenting the want of them, and are suffering from the profoundest sorrow. The principles of filial piety, love, friendship and gratitude, are sometimes carried to excess, and augment the disquietude and fears of the melancholic, and impel him to such acts as flow from despair. Thus a mother believes she is abandoned by her husband, and desires to slay her children to preserve them from a like misfortune. A vine-dresser slays his children, in order to send them to heaven. The languor, and monotonous repetition of the movements, actions and words of the lypemaniac, and the state of despondency into which he is plunged, would impose upon us, if we believed that his mind was inactive, like his body. The attention of the melancholic is of very great activity, and directed to a particular object with a degree of intenseness, that is almost insurmountable. Wholly engrossed by the object that affects him, the patient cannot turn aside his attention, nor fix it upon other objects foreign to his affection. The mind, like the brain is, if I may be allowed the expression, in a tetanic state, and a strong physical or moral commotion can alone cause this spasm to cease. There being no lesion of the reason, except on a single point, it seems as if lypemaniacs called into vigorous exercise all their intellectual power, to fortify themselves in their delirium. It is scarcely possible to imagine the full force and subtilty of their reasonings in sustaining their prejudices, disquietudes and fears. Rarely do we succeed in convincing, and never in persuading them. *I understand well what you say to me*, (says a melancholic), *you speak reasonably, but I cannot believe you.* Sometimes, on the contrary, the mind of melancholics is in a cataleptic state. They seize upon with energy, and preserve with more or less tenacity, the suggestions that are made to them, and we can in such cases, cause them to change their notions almost willingly, provided that the new ideas have some relation with the prevailing passion. A lady gets the idea that her husband wishes to shoot her, escapes from her château, and throws herself into a well. She was told, that if she wished to destroy herself, poison would be an easier means of effecting this purpose. She immediately becomes afraid of it, and refuses every kind of food. A melancholic conceives that he is disgraced. After having in vain sought to reassure him, they offer him religious consolation, when he at once believes that he is damned.

Some lypemaniacs possess a knowledge of their condition, have a consciousness of its falsity, and of the absurdity of the fears with which they are tormented. They perceive clearly that they are irrational, and often confess it, with grief and even despair. They are however, brought back by the passion that controls them, to the same ideas, fears, disquietudes and delirium. It is impossible for them to think, will or act against it. Many assure us, that a resistless power has taken from them their reason, and that this power is God, the devil, *fate;* and that they no more possess the ability to direct it, than that of controlling their will. Is not this *reasoning* lypemania? The will of most lypemaniacs is inflexible. Nothing can subdue it, neither reasoning, nor the solicitations of the most active tenderness, nor threats. Nothing can triumph over their errors, their alarms or fears. Nothing can remove their prejudices, their repugnances or aversions. Nothing can divert them from the engrossing thoughts that occupy their mind and heart, but strong and unexpected shocks, sufficient to attract their attention. Some lypemaniacs no longer possess the power of volition, or if they will, they are wholly incapable of executing their purposes. After having struggled and combated a desire which presses them, they remain inactive.

An aged magistrate, very much distinguished for his wisdom and eloquence, in consequence of troubles, is seized with an attack of monomania, attended with agitation, and even violence. After some months the delirium ceases,

but the patient retains unfounded prejudices. At length, he recovers the entire use of his reason, but remains unwilling to return to society, although he knows that he is in the wrong. He is also unwilling to occupy himself, or to think about his affairs, although he knows very well, that they are suffering from his caprice. His conversation is both rational and intellectual. Does one speak to him of traveling or of attending to his affairs, he replies; *I know that I ought and am able to do it, your advice is very good, I would follow your counsels, I am convinced; but make me able to will, by means of this will, which determines and executes. It is certain*, said he to me one day, *that I only have the ability not to will, for I have my reason entirely, I know what I ought to do, but strength abandons me, when the time for action comes.*

Lypemaniacs are never unreasonable, not even in that sphere of thought which characterizes their delirium. They proceed upon a false idea, as well as wrong principles; but all their reasonings and deductions are conformable to the severest logic. To one who is a stranger to their delirium, they differ in nothing from others;—correctly appreciating whatever is brought under their observation,—judging well of persons and facts, and reasoning as justly as before their illness. But the character and affections, the habits and mode of life of the melancholic, have changed, as always happens in delirium, because delirium changes the natural relations between the patient and the external world. He who was prodigal, is now avaricious;—the warrior is timid and even pusillanimous;—the laborious man no longer wishes to labor;—libertines with grief reproach themselves, and repent;—he who was the least exacting, cries out treachery;—all are diffident and suspicious, and on their guard with respect to whatever they say or do. They speak little, uttering only a few monosyllables; having but a single thought, they repeat incessantly the same words. A few only are loquacious, who utter complaints and recriminations, expressions of fear and despair.

CAUSES OF LYPEMANIA.

The causes of melancholy are numerous, and are common to other forms of insanity. We shall speak in this place of those only, which have a more immediate influence on the frequency and character of melancholy.

Seasons and climates.—Climates and seasons have a special influence on the production of this malady. The inhabitants of mountainous regions, who are partially civilized, are seized with nostalgia on leaving their country; whilst the inhabitants of the plains who are advanced in civilization, are little disposed to suffer from this malady. The neighborhood of marshes, or a foggy and humid atmosphere, by relaxingt he solids, predisposes to lypemania. Dry and warm countries, where certain winds prevail, also predispose to it. All know the effects of the sirocco upon the Italians, in producing melancholy; of the solano, upon the Spanish, and the kamsim upon the Egyptians. In regions where the atmosphere is hot and dry, sensibility is most exalted, the passions are most vehement, and melancholics most numerous. Such were Greece and Egypt, according to the testimony of Areteus, of Bontius, Prosper Alpin and Avicenna. This report is confirmed by the statement of modern travelers, who assure us that melancholic affections are frequent in Asia Minor, in Upper Egypt, Bengal, and on the African coasts. Hippocrates, and all authors who have succeeded him, assure us that autumn is the season which produces the greatest number of melancholics. This season, according to Cabanis, is fruitful in maladies of this kind, in proportion as the summer has been hot and dry. This remark is confirmed by my own observations, made in the autumn of 1818. All physicians noticed that melancho-

ly was more frequent this year, during the months of October and November, than in preceding years. We received at the Salpêtrière, during these two months, a much greater number of melancholics, and particularly of suicides, than we usually admitted. Notwithstanding the general opinion, I shall be compelled to believe that spring and summer produce, at least in our temperate regions, more melancholics than other seasons. This difference may perhaps depend upon difference of climate. It is certain that the reports, made during four years at the Salpêtrière, justify this opinion, which will appear perhaps a paradox, but which I think worthy the attention of observers, especially as it is confirmed by my later observations. It is with this hope, that I hazard my doubts without farther discussion.

Finally, the most favorable season for the cure of lypemaniacs, is spring; whilst lypemania is ordinarily exasperated during autumn and winter.

TABLE OF LYPEMANIACS WITH RESPECT TO SEASONS.

Report of the Salpêtrière.					
Months.	1811	1812	1813	1814	*Totals.*
January	3	3	9	5	20
February	5	3	7	4	19
March	10	5	9	5	29
April	4	9	4	4	21
May	11	19	12	4	46
June	7	11	10	6	34
July	9	16	12	8	45
August	8	10	11	15	44
September	14	4	12	9	39
October	6	8	16	5	35
November	8	8	6	4	26
December	12	5	10	7	34

According to the preceding table, it is certain that during four years, the admission of lypemaniacs has been more numerous at the Salpêtrière, during the months of May, June, July and August, than the other months of the year.

Age.—The mobility of infancy, as it secures the child from strong and durable impressions, would entirely protect it from lypemania, were it exempt from all passion. But jealousy sometimes poisons the sweet enjoyments of early life, and produces a true melancholy with delirium. Some children, jealous of the tenderness and caresses of their mother, become pale and emaciated, fall into a state of marasmus, and die. Children are also exposed, though less frequently, to nostalgia. At the epoch of puberty, the development of new organs exciting new wants and sentiments, the young adolescent feels the influence of new passions, and his days pass happily and peacefully away, without regrets for the past, or solicitudes respecting the future. But if the primitive passions exercise over him complete sway, and exalt his imagination; vexations, the torments of love, and erotomania, come in to mar his earliest enjoyments. The struggle of the amorous passions with religious principles, which are the fruit of early education, exposes the young man to religious lypemania; and if onanism, or premature enjoyments; if the abuse of pleasure and excessive study, have been substituted for the pure and varied pleasures of this age, we ought then to fear an incurable melancholy. At

adult age, the sensibility is less excitable, the imagination less active, and the other faculties of the mind act with greater energy. Factitious passions replace the passion of love; relations with loved objects become relaxed, whilst family cares, personal interest, love of glory and ambition, assume a more complete empire over the soul. If troublesome predispositions exist, and if moderation places no check upon the factitious or social passions, at the least shock or reverse, man becomes gloomy, sad, suspicious, and in fine, melancholic. It is also, towards the termination of this period, that the disturbances connected with the cessation of the menses, and the abandonment of the world and its pleasures, expose women to a thousand varied ills, and among them, to melancholy; particularly those, who have made society and coquetry, the only occupation of their frivolous life. A sense of his weakness, renders the old man more composed. His thoughts and desires have lost their energy, the imagination is at rest, the passions are extinct; and can melancholy take possession of minds destitute of passion? This malady is very uncommon in old age, except that form which is denominated senile melancholy; a state, in which the old man, after a stormy and dissipated life, meditating upon the errors into which his passions have drawn him, isolates himself, becomes sad, uneasy, hard to please, avaricious, suspicious and egotistical; often unjust towards his friends, his own children and society at large.

The following abstract, made at the Salpêtrière, proves that lypemania is very frequent in early life, that is to say, between the age of twenty-five and thirty-five years; and that it constantly diminishes after this period, and rarely appears after the age of fifty-five years. The report, made up from the higher and wealthy classes of society, gives the same results.

TABLE OF AGES.

	Ages.								
Years.	20	25	30	35	40	45	50	55	60
1811	7	19	16	13	13	10	9	1	6
1812	8	23	16	9	15	9	12	3	6
1813	8	14	18	15	17	22	11	3	9
1814	4	8	12	10	7	7	6	4	8
Totals.	27	64	62	47	52	48	38	11	29

Sex.—Women, in consequence of their constitutional gentleness, and the mobility of their sensations and desires, as well as by the little application which they make with reference to any matter, seem to be less subject than men, to melancholy. Such was the opinion of Areteus, of Cœlius Aurelianus and the ancients. But, are not the extreme susceptibility and sedentary life of our women, their peculiarities even, the predisposing causes of this malady? Are not women under the control of influences to which men are strangers; such as menstruation, pregnancy, confinement and nursing? The amorous passions, which among them are so active; religion, which is a veritable passion with many, when love does not exclusively occupy their heart and mind, jealousy, fear, do not these act more energetically upon the minds of women than men? Religious melancholy is also very frequent among them, especially in the lower classes of society, and in countries where ignorance generally prevails. Girls, widows, and sometimes women at the critical period of life, are a prey to erotic melancholy. Men, says Zimmermann, are insane from pride, girls from love, and women from jealousy.

Temperaments.—The melancholic temperament of the ancients, and the bilious-nervous of Hallé, predispose to lypemania. Persons of this temperament are tall and slender, and the muscles small, but well defined. The chest is narrow and confined, the skin brown or sallow, the hair black, and the eyes are sunken and full of fire. The physiognomy is sad and uneasy, the look timid or fixed, sensibility is exquisite, and all the passions are extreme. These individuals love or hate intensely, and with obstinacy. Thoughtful, taciturn, jealous and suspicious, they concentrate their affections. Society calls upon them importunately, but they fly from it; preferring solitude, in which their imagination and affection can exercise themselves without disturbance. They are well calculated for the cultivation of the arts and sciences. They have little memory, but their ideas are strong, their conceptions vast. They are capable of profound meditation. Often, exclusively devoted to the objects of their study, it seems as if they had no thought or interest, except in a single definite object, to which they devote themselves with the utmost ardor. These persons are especially predisposed to lypemania. It was said by Aristotle, that men of genius, and great statesmen, are ordinarily melancholics. Mahomet, Luther, Tasso, Cato, Pascal, Chatterton, J. J. Rousseau, Gilbert, Alfieri, Zimmermann, etc., confirm the opinion of Aristotle, which was justified by his own individual example. This temperament does not belong exclusively to that variety of genius, which engages itself in thinking, speaking, and doing well; but is the temperament also, of some great villains, and very wicked persons. Those evil geniuses, who are sent into the world to be the terror of it, and to tyrannize over their fellow citizens, are not always exempt from the torments of the blackest melancholy. Their harsh and repulsive physiognomy wears the impress of their hateful and malevolent passions. Their aversion to men, causes them to seek solitude, and to fly the presence of their fellow creatures. Acquired constitutions or temperaments, in which the hepatic or hemorrhoidal system predominates, also predispose to lypemania.

Professions and mode of life.—Corporeal labor maintains the physical forces, at the same time that it distributes them uniformly among all the organs. It is the best check upon the passions, which it moderates, at the same time that it prevents the imagination from blending itself with our pleasures and corrupting them. An idle and inactive life, the transition from a very active to a sluggish and indolent one, abounding in leisure; excessive night-watching, by exhausting the physical energies, and sleep unduly prolonged, by depressing the powers both of body and mind; occasion moroseness and mental torpor. Excessive study exhausts man, says Celsus, more than labor of the body, if it encroaches upon time, which properly belongs to repose and exercise. If it is concentrated upon a single object, and this is abstract, mystical or romantic, then the man is in constant danger of becoming a lypemaniac. Melancholy is still more to be dreaded, if, to excessive study, are joined errors of regimen, dissipated and dissolute conduct, or a too decided taste for a solitary life. Zimmermann relates many examples of melancholy, produced from this last cause.* There are certain professions, which more particularly predispose to this malady, because they exalt the imagination and passions, and expose those who practice them, to errors of regimen of every kind: such are musicians, poets, actors, and merchants who are engaged in hazardous speculations. I could name more than twenty actors, in behalf of whom I have been consulted.

The physical causes, which we may call pathological, in general act by enfeebling the constitution, or by impressing upon the fluids, a morbid character. Prolonged fasting and hunger, have been referred to by several authors, par-

* Solitude, trans. by A. J. L. Jourdan, Paris, 1825, in 8vo.

ticularly Santacrux, as calculated to produce melancholy. This influence is even consecrated in popular language, and the habit of surcharging the stomach with aliment, difficult of digestion, especially among men who take little exercise, disposes to the same malady. Some physicians have pretended, that the habitual use of milk renders one sad, and is hurtful to melancholics. It is certain that the use of this article produces head-aches among persons of a bilious-nervous temperament. The abuse of opium, of hot drinks, and alcoholic liquors, often causes lypemania, and leads melancholics to suicide. Perhaps we ought to attribute to the abuse of hot drinks and alcohol, the great number of suicides which we observe in England. This is indeed the opinion of many English physicians. Women are often brought to our hospital who, while in a state of intoxication, or during the delirium that succeeds it, fall into a state of lypemania, with an inclination even to suicide. Onanism and continence after marriage, sometimes produce melancholy. The suppression of an habitual evacuation, of the transpiration, of a hemorrhoidal flux, and obstinate constipation, occasion melancholy. Sanctorius has observed, that a defect of transpiration renders a person sad, and Voltaire remarked, that constipation influenced to a frightful extent, the determinations of the great. The retrocession, or sudden cessation of any morbid affection whatever, may cause lypemania where there is a predisposition to the malady. The same effect may be produced, by the suppression of an issue, herpes or psora. We see lypemania replace phthisis pulmonalis, hysteria, hypochondria, epilepsy, mania and monomania, or alternate with these diseases. It is not rare that, on the cessation of the general delirium and excitement which characterize mania, those so afflicted fall into a state of profound melancholy, with an indication even to suicide. Some are controlled by a painful sentiment, with which the recollection of their delirium inspires them, a sentiment unfortunately strengthened by prejudice. Others are impressed with the idea that they are no longer of any service in society, and persuade themselves that they are useless, or a charge to their relatives and friends, or objects of contempt among their fellow citizens.

M. W., forty-eight years of age, and of a very strong constitution, having taken an active part during the reign of terror, is removed by the directory, and sent on an embassy. The first Consul recalls him and names him a prefect. Not being appointed to a post corresponding with that which he had just left, nor by any means with the aspirations of his ambition, he gave himself up to a thousand exaggerations and extravagances, in his conversation and actions. He soon persuades himself that he is king, and abandons himself to all the pretensions with which such a conviction inspires him. He requires that every one should prostrate himself before him, is constantly making and unmaking ministers, and prodigal of favors, honors and wealth. His step is proud and imposing. He sleeps little, eats much, and suffers from constipation. He is committed to my care, and after some months recovers his reason, takes a very correct view of his condition, and we consider him cured. Soon after however, he falls into a profound melancholy with delirium, accompanied with sadness and imaginary fears, which follow him to the close of life. He dies, from a frightful cerebral hemorrhage, five months after the attack of melancholy. At the post-mortem examination, the cerebral substance was found to be very much injected, softened, and as it were, triturated, around the effused blood. All the viscera were healthy. The gemini muscles resembled smoked bacon, having the color and density of it. Their normal texture, together with the muscular fibres, had disappeared. During the last two months of his life, he remained standing motionless, or walked, slowly placing the feet one before the other, at every step. From the commencement of this disease, he had manifested some slight symptoms of a paralysis of the tongue, and had acquired much flesh.

The passions constitute a true form of insanity, but one which is of temporary duration. They take possession of the intellectual faculties, and so completely absorb them, that the individual is incapable of directing his thoughts to any thing other than the object of his passion. Whether the moral affections and the passions have their seat in the heart, in the phrenic centre, in the solar plexus, in the trisplanchnic nerve, in the ganglions, in the brain, or are only the effects of a reaction of the soul or vital principle, it is ever true, that they exercise a powerful influence over the functions of organic life, as well as the understanding. If the passions have an influence over all our functions in a state of health, how much more energetic will this influence be in a malady, in which disorder of the passions forms the principal characteristic! The moral affections are the most frequent cause of lypemania; their disorder is the most prominent symptom of it, and in the hands of a skillful physician, are a powerful means of cure. Disappointed affection, jealousy, fear,—which is the perception of a future ill, or one which threatens us,—and fright,—which is the perception of a present ill,—are the passions which produce the greatest number of lypemaniacs, particularly in youth, among women, and in the lower classes of society; whilst ambition, avarice, wounded self-love, reverses of fortune, and gaming, are the most frequent cause of insanity among adults, and men of mature age, in the higher classes of society, and in those countries whose customs and institutions foster all the social passions. The depressing passions are, most generally, the cause of melancholy with delirium. At one time, they act slowly, and by repeated attacks, progressively fatigue the organs, and steel, so to speak, the sensibility. The enfeebled mind then supports with difficulty any opposition, and man becomes fearful, because he is feeble, and very sensitive. At another, the moral affections, lively and abrupt, suddenly overwhelm the sensibility, and at once sink the patient into melancholy. The following tables indicate the differences, with respect to frequency, which the causes of lypemania present.

TABLE OF CAUSES.

Hereditary predisposition	110
Suppression of the menses	25
Critical period	40
Consequences of confinements	35
Fall upon the head	10
Masturbation	6
Libertinism	30
Abuse of wine	19
Domestic troubles	60
Reverses of fortune and consequent misery	48
Disappointed affection	42
Jealousy	8
Fright	19
Wounded self-love	12
Anger	18
Total	482

The causes of lypemania, like those of other mental diseases, do not always act immediately upon the brain; that is to say, there are cases of sympathetic melancholy. Now, different foci of sensibility react upon the brain, to produce the delirium of melancholy; and now, the predominance and lesion of an organic apparatus, occasion the same reaction. All the symptoms appear

to depend upon the disorder of some viscus, more or less remote from the centre of sensibility. How numerous are the cases of melancholy, that have succeeded hypochondria! How many melancholics are there, who recognize, in particular, lesions of the abdominal viscera, as the causes of chronic maladies! Hence, we give to these affections the appellation of hypochondriacal lypemania. I have seen a merchant who, having fallen into a profound melancholy, attended with a refusal to take nourishment, and attempts upon his life, assured us, that a foreign body had been arrested in his throat, which entirely prevented his swallowing. His friends were certain that he had taken nothing that could cause an inflammation of the œsophagus, and an inspection of the part, removed all disquietude with respect to it. The patient, in the deepest distress, was constantly demanding the removal of this foreign body. Three months afterwards, he fell into a marasmus and died.

At the post-mortem examination, I found an ulcer of a syphilitic aspect, occupying the superior third of the œsophagus. Bonet speaks of a countryman, who assured him that he had a toad in his stomach, that he heard his noise, and felt him hopping about, etc. At his death, they found a cancer of that organ. I have many times seen hypochondriacal lypemaniacs, who affirmed that they had devils in their stomachs, and believed that the abdomen was full of unclean animals. They were also convinced that, by the aid of electricity and magnetism, the most acute pains were produced in their intestines. In these cases, the opening of the bodies revealed chronic peritonitis, a cancer of the stomach, and gangrene of the transverse colon. One patient thought he had birds in his belly, and was afraid to go to the water-closet, through fear that these birds escaping, we should become apprised of his infirmity. Many times, he begged me to listen to the noise of these birds. What he experienced, resulted from flatus, and borborygmi.

The causes of lypemania, like those of all other maladies, are predisposing or remote, proximate or exciting; but these distinctions cannot be rigorously applied to this or that cause, for it often happens, that those causes which we call predisposing, are exciting; and reciprocally. The exciting causes alone, seem to have been sufficient to provoke the malady. Usually however, there is a concurrence of the two orders of causes. A first event, disposes to the disease; a second, causes it to break forth.

M. B., twenty-three years of age, is on the eve of marriage to the lady whom he adores. Insurmountable obstacles interfere, to break up their designs. He becomes sad, morose, uneasy, flies society, and in a word, is melancholic. At the expiration of six months, he fails to obtain in the service, the advancement which he expects, and immediately falls into the deepest despair. He accuses all men of injustice, and believes himself to be the object of their hatred and persecutions. In the street, while walking, and in traveling, he often thought that they were mocking him, and demanded satisfaction of them. He once fought a duel with a soldier whom he had never before seen, with whom he met by accident, and by whom he persuaded himself that he had been insulted. At length, he made several attempts to commit suicide, but was cured after the lapse of a year.

A merchant forty-five years of age, is interested in a bankruptcy, which for a brief period embarrasses him, without impairing his fortune. On the day of this reverse, his character changes. He becomes more gay than usual, and laughs at this mischance; felicitating himself in having thereby acquired a more thorough knowledge of men. He forms projects incompatible with his fortune and unsuited to the condition of his affairs. Eight days pass in this state of joy, satisfaction and activity, which occasions apprehension of a grave disease, of which he has himself a presentiment. After this epoch, political events wholly foreign to his interests, but which oppose his views, plunge him into a melancholy delirium from which nothing relieves him.

It is not rare, to see lypemania burst forth without any assignable cause. Nevertheless, by observing the patient with special care, by informing ourselves of his mode of living and habits, we discover the true origin of the evil, which is often some concealed moral affection. Hippocrates, Erasistratus, Galen, and Ferrand in his *Treatise on Love*, cite memorable examples of their sagacity in discovering the feigned or concealed causes of lypemania. I have often been able to foretell that onanism was the real but concealed cause of the disease. It also happens, that the exciting causes, whether physical or moral, act so suddenly, that the delirium appears at once, especially when the predisposing influences are numerous or strong. Lypemania is continued, remittent or intermittent. The remittent form is most frequent, and there are few lypemaniacs whose delirium is not exasperated on alternate days. Many experience a very marked remission at evening and after dinner; whilst others suffer most on waking, and during the early part of the day. With the latter, this exasperation of the symptoms, depends, now upon the pain which they experience at the thought of being obliged to drag out a miserable existence for another day, whose interminable length frightens them, and now, from fear that their enemies will profit by the occasion, to execute their dreadful purposes. Certain persons, who suffer from panophobia, are afraid at the approach of night and darkness. The shades of night arouse their apprehensions; robbers can more readily introduce themselves; insomnia and dreams terrify them in advance. Intermittent melancholy presents nothing in particular; nothing that we can add to what has been said respecting intermittent insanity.

Continued lypemania has, in general, a very slow course; and besides the partial delirium which characterizes it, is complicated with a multitude of symptoms, whose exasperation coincides with that of the delirium, or provokes it. It is usually in the spring that it terminates in health; but can we rely upon an effectual cure, if it is not preceded by some commotion or by some crisis, either physical or moral? I am always doubtful respecting a cure, when I have been unable to observe any previous crisis. As in other forms of insanity, so in this, crises are very numerous. Now, they occur by the skin, in the reëstablishment of the transpiration, in abundant sweats, exanthemata and furuncles. We find examples of them in every author; now, by habitual hemorrhages which were suppressed, and by the menses; and now, by mucous, bilious, brown, blackish and even sanguineous evacuations, which take place, either by vomiting or alvine dejections. These critical evacuations are observed more frequently than others; are referred to by all authors, and are the crises which art may provoke with the greatest success. Hippocrates tells us that Adamentus was cured by vomiting a great quantity of black matter. Lorry and Halle* relate similar examples. Pinel speaks of the cure of two melancholics; one, by the development of one of the parotids; the other, by a jaundice. Lypemania is also terminated by moral shocks. A violent passion suddenly provoked, by producing a diversion of the thoughts, which have been previously fixed, effects a cure. The malady ceases from the effect of fright or fear, and by the effect of a stratagem well concerted, and managed according to the character of the malady and that of the patient. The return to reason also takes place, when by his attentions and discourses, a skillful physician knows how to possess himself of the confidence of the patient. This first step taken, the cure is easy. In some cases, we effect a cure by satisfying the desires of the patient, and granting to him the object of the passion which has provoked the delirium. Melancholy is also terminated by the explosion of maniacal delirium. This termination is rare; and we might anticipate, that the transition from tranquil lypemania to fury,

* Memoirs of the Medical Society of Emulation, t. iii, p. 348.

would be succeeded by fatal accidents, and the prelude to a speedy death, either natural or provoked. Lypemania sometimes passes into mania. It is doubtless this transformation, which has caused melancholy to be confounded with mania. It degenerates not unfrequently, into dementia. In this condition, the prevailing ideas still remain; but they are incoherent, without connection, order or harmony with the actions; whilst before, the ideas and convictions were strong, and the reasonings, desires and determinations, the just and immediate consequences of the ideas which characterized the delirium.

DISEASES TO WHICH LYPEMANIACS SUCCUMB.

POST-MORTEM EXAMINATIONS.

Melancholy terminates in death. Lorry and Mead assure us, that phthisis pulmonalis is its most frequent termination. The English believe, that it often terminates in dropsy of the chest. The great number of post-mortem examinations that I have made, confirm the observation of the first named writers. I have also seen many abdominal affections put an end to the existence of melancholics. Scurvy and consecutive gangrene, cause the death of a large number of lypemaniacs. The want of exercise, and bad regimen of these patients, and the chagrin which pursues them, by enfeebling, exposes them to chronic inflammations of different organs. I ought not to forget onanism as calculated to produce the most fatal effects upon the health and life of these unfortunate people. It is one of those errors to which they yield themselves, and to which it is important to call the attention of those who have to direct and watch over the insane.

Pathological anatomy has taught us nothing positive respecting the seat of melancholy. It is not that the examination of bodies is wanting, but observations are incomplete. We cannot distinguish what is proper to lypemania, from what appertains to hypochondria or mania, with which it has been confounded. In the post-mortem examinations of the insane, and consequently in those of melancholics, they have too frequently neglected to notice the diseases that caused their death. I have taken great pains to ascertain these diseases. The following are my observations with respect to this subject.

TABLE OF DISEASES TO WHICH LYPEMANIACS SUCCUMB.

Adynamic fever	10
Marasmus, and slow fever	24
Phthisis pulmonalis, and chronic pleurisies	62
Diseases of the heart	16
Chronic phlegmasiæ of the abdomen	32
Scurvy	26
Apoplexy	6
Total	176

From this report, it appears that melancholics die most frequently, in consequence of chronic diseases, particularly from affections of the chest. Marasmus, and a slow nervous fever, present all the characteristics of the *tabes melancolica* described by Lorry. These patients complain, some of them of cardialgia, others of colics. They eat little, though in some cases the appetite is voracious. Nevertheless, they become gradually emaciated and enfeebled. Constipation is at first obstinate, and they suffer from irregular febrile paroxysms, which occur most frequently at evening. The pulse is feeble and

concentrated, and the heat of the skin pungent. The skin is sometimes covered with a viscous perspiration, but is most generally dry, and of an earthy aspect. The patients fall into a state of extreme feebleness, and no longer leave their bed. They lose both voice and appetite; their features change, and at length life becomes extinct, without a struggle or pain. Some lypemaniacs are for a longer or shorter period before death, troubled with a serous and sometimes a sanguineous diarrhœa, which is symptomatic of phthisis, scurvy and chronic enteritis. The ancients ascribed melancholy to accumulations of black and thick bile, and to corroding humors, which, arising to the brain, obscured as with a veil, the organ of thought, and thus impressed a sad, sombre and timid character upon the delirium of melancholics. Some authors have pretended to find these humors in the brain. The advancement which pathological anatomy has made in our days, permits us to offer a reason for this phenomenon. It is very true, that we find in the brain of some melancholics, a reddish, yellow fluid; but every one now knows, that this is not bile, but the residue of a sanguine effusion, or of a softened portion of the brain. This matter is now contained in a cyst; and now effused in a loose net-work, formed by the cerebral substance. This alteration we observe in the brain of individuals, who have never been insane. It coincides with melancholy, but is neither the cause nor effect of this malady.

Bonet, in the *Sepulchretum*, says that the vessels of the encephalon are distended and engorged with blood, and that there are effusions into the sinuses of the brain. He refers especially, to lesions of the thorax and abdomen among melancholics. Boerhaäve says that the brain is hard, friable, and of a yellowish white, and that the vessels of this organ are gorged with coagulated black blood. We can conclude nothing from these facts, since the authors who report them, confound melancholy with mania. Some moderns assure us, that among melancholics the gall-bladder contains concretions, but this is by no means constant. The heart has sometimes appeared destitute of blood, or else its ventricles have been found full of concretions, called *polypi*. Gall assures us, that the cranium of suicides is thick and hard. I have in my possession, the crania of several insane persons who have committed suicide, which are very soft. One of the alterations which I have frequently met with among melancholics, is the displacement of the transverse colon. I have reported several cases in proof of it. The transverse position of the colon becomes oblique, and even perpendicular; its extreme left is situated near the pubes, and is sometimes concealed behind the symphisis. The following case will interest those who are fond of political phenomena, and who seek for extraordinary facts in medicine.

Téroenne or Théroigne de Méricour, was a celebrated courtesan, born in the city of Luxemburgh. She was of medium height, had chestnut colored hair, large blue eyes, a changeful physiognomy, and a sprightly, free, and even elegant carriage. This girl, in the opinion of some, of honorable birth, and in that of others, springing from the rank of courtesans, acted a truly deplorable part, during the first years of the revolution. She was then from twenty-eight to thirty years of age. She devoted herself to the various chiefs of the popular party, to whom she was of service in most of the riotous disturbances, and contributed, especially on the 5th and 6th Oct. 1789, to corrupt the regiment of Flanders, by leading into its ranks, women of ill fame, and by distributing money among the soldiers. In 1790, she was sent into the city of Liege, to arouse the people. She there took a military rank. She made herself remarkable among this unbridled populace, which was sent to Versailles on the 5th and 6th of Oct., 1790. The Austrians arrested her in the month of January 1791. She was conducted to Vienna, and confined in a fortress. The Emperor Leopold saw her, conversed with her, and caused her to be set at liberty in Dec. of the same year. She returns to Paris, and once more ap-

pears upon the stage during the period of the revolution. She then made herself conspicuous upon the terraces of the Tuileries, and on the rostrum, haranguing the people with boldness, in order to bring them back to *moderation*, and the Constitution. This course cannot suit her long. The Jacobins shortly repair to Téroenne, and we immediately see her appear, a red bonnet upon her head, a sword by her side, and a pike in her hand, commanding an army of women. She took an active part in the events of September, 1792. Although it may not be proved that she participated in the massacres, it is said, nevertheless, that she entered the court of the abbey, and with her sword cut off the head of an unfortunate man, whom they were conducting to the tribunal of this prison. We are assured that it was a former lover.

When the Directory was established, and popular associations ceased, Téroenne lost her reason. She was conducted to a house in the suburb St. Marceau. They found in the papers of St. Just, a letter from her, dated July 26th, 1794, in which signs of a wandering intellect are shown. In Nov., 1800, she was sent to the Salpêtrière and on the following month was transferred to the Petites-Maisons, where she remained seven years. When the Administration of hospitals caused the insane to be removed from the Petites-Maisons, Téroenne returned to the Salpêtrière Sept. 1807. She was then about forty-seven years of age. At the time of her admission, she was very much agitated, reviling and threatening every body, speaking only of liberty, of committees of public safety, revolutionary committees; and accusing all who approached her of being moderates and royalists. In 1808, a distinguished personage, who had figured as chief of a party, visits the Salpêtrière. Téroenne recognized him, and raised herself from the bed of straw upon which she was lying, and overwhelmed the visiter with abusive language; accusing him of having abandoned the popular party, and of being a moderate, *to whom a decree of the committee of public safety would soon do justice.* In 1810, she becomes more composed, and falls into a state of dementia, which enabled us to observe traces of her early prevailing ideas. Téroenne was unwilling to wear any clothing, even a chemise. Every day, both morning and evening, and many times a day, she waters her bed, or rather the straw of it, with several buckets of water, lies down, and covers herself with her sheet only, in summer, and with both sheet and coverlid, in winter. She amuses herself in walking with naked feet, in her cell flagged with stone, and inundated with water. Severe cold causes her to change this regimen in no respect. Never have they succeeded in inducing her to sleep in a chemise, nor to employ a second covering. During the last three years of her life, she was provided with a very large morning gown, which however, she rarely put on. When it froze, and she had not water in abundance, she was accustomed to break the ice, and take the water which she obtained from it and wet her body, particularly her feet.

Although in a small and gloomy cell, very damp and without furniture, she enjoys good health, and pretends to be occupied with very important matters. She smiles to persons who accost her, and sometimes replies hastily, *I know you not*, and conceals herself under her covering. It is rare that she replies correctly. She often says; *I do not know; I have forgotten.* If they insist, she becomes impatient, and talks to herself in a low voice. She articulates phrases, interspersed with the words, *fortune*, *liberty*, *committee*, *revolution*, *rascal*, *warrant*, *decree*, etc. She applies many of them to the moderates. She is angry and transported with passion, when opposed; especially when they desire to prevent her from taking water. She once bit a companion with so much fury, as to take out a piece of flesh. The disposition of this woman had therefore outlived her understanding. She rarely leaves her cell, generally remaining there in bed. If she goes out, it is in a state of nudity, or covered only with her chemise. She takes but few steps, most frequently pro-

ceeding upon all fours, and extends herself upon the ground. With a fixed eye, she collects all the offal she finds upon the pavement, and eats it. I have seen her devour straw, feathers, dried leaves, and morsels of meat lying in the dirt. She drinks cistern water, whilst they wash the courts, although it may be dirty, and charged with filthy matters; preferring this drink to every other. I endeavored to induce her to write. She traced a few words, but was never able to complete a sentence. She never gave any indication of hysteria. Every sentiment of shame seems to be extinct, and she is habitually naked without blushing, in the presence of men. Wishing to obtain her portrait in 1816, she willingly sat for it, but appeared to attach no importance to the work of the painter. Notwithstanding the regimen to which she subjected herself for ten years, the menses were perfectly natural. Her appetite was good, she was not sick, nor did she contract any disorder. Some days before entering the infirmary, an eruption appeared over the whole body. She washed however, as usual with cold water, and lay upon her wet bed. The eruption disappeared, and from that period she remained in bed, eating nothing, but drinking water.

May 1st, 1817. Téroenne enters the infirmary, in a state of extreme feebleness, refusing all nourishment, drinking water, remaining in bed, and often talking with herself, but in a very low tone. 15th. Emaciation, extreme paleness of the face, eyes glazed and fixed, some convulsive movements of the face, pulse very feeble, slight swelling of the hands, and œdema of the feet. At length, on the ninth of June, she dies, at the age of fifty-seven years, without seeming to be restored, for a moment, to the use of her reason.

Autopsy at 10 o'clock, A. M. Dura-mater adherent to the cranium, which is thick posteriorly, and the median line much warped. The brain was very soft and discolored, and the membrane which invests the ventricles, thickened. The subjacent cerebral substance, for the thickness of a line, is of a vitreous aspect, and a greyish white. The plexus choroides was discolored, presenting small serous cysts. The internal carotid arteries which pass along the cavernous sinuses, have acquired the diameter of a very large quill. The pituitary gland contains a brownish fluid. There is serum in the pluræ, as well as in the pericardium. The heart is flaccid. The stomach is distended with a greenish fluid. The transverse colon is precipitated perpendicularly, behind the pubes. The liver is small, and greenish in color; its tissue very soft; and its proper tunic detached with the greatest ease. The gall bladder is distended with black, thick and clotted bile. The spleen is soft and green, like the liver. The bladder is very much contracted, and its walls thickened. The envelope of the ovaries is thick, and even cartilaginous at several points. In the case of Téroenne, as in those which follow, the transverse colon had changed its direction, and descended behind the pubes.

Jane, fifty-eight years of age, is admitted at the Salpêtrière Oct. 5th, 1811, having always enjoyed good health. Her father became insane after having been trepanned, and one of her daughters had thrown herself into the river after her confinement. By occupation she was a seamstress, was married at the age of twenty-six years, and became the mother of eight children. At forty-five years of age, the menses ceased without accident. When fifty-four years of age her son enters the army. Sadness, tears, melancholy and delirium succeed this event. She is several times bled, and is cured. Fifty-eight years of age. Suddenly, and without cause, she has a new attack of delirium, attended with sadness and weeping. This happened May 19th, 1811. On the 21st, they brought, her to Charenton, from whence at the expiration of five months, she is sent to the Salpêtrière. Fifty-eight and a half years of age. At the period of her admission into the hospital, Oct. 5th, 1811, she is extremely emaciated, her physiognomy expressive of disquietude and trouble, and her skin dry and brown. She is always ready to go away. During the night she

leaves her bed, with a view to take her departure. She is constantly repeating; my God, my God! and demanding her children. She prays us to conceal them, goes and comes, and worries herself—supplicating and often weeping. She is forgetful, not knowing even how to find her bed. She eats little; and her dejections are frequent, involuntary, and of a mucous character. Oct. 26th. Jane enters the infirmary, in consequence of her feebleness and bowel affection. Besides, there are the same moral disquietudes and agitation; nor does the sight of her relatives bring composure. Insomnia. Jan. 1812. The feebleness augments, the diarrhœa persists, and the patient can no longer leave her bed. Towards the end of the month, the tongue becomes black, the lips brownish, and the pulse very feeble and frequent. All the adynamic symptoms are clearly marked. In February, eschars form on both trochanters and the coccyx, and death takes place on the 11th of the month.

Autopsy, the 12th. Marasmus; cranium soft and injected; the median line dividing the brain into two unequal parts. Serum at the base of the cranium; cerebellum soft, and cerebrum dense. The arachnoid is injected, and the plexus choroides presents small serous cysts. The lateral ventricles are reduced on every side, with very extended adhesions at the posterior part. The transverse colon has fallen almost perpendicularly into the pelvic cavity, carrying with it a great part of the descending portion. The stomach is contracted with deep folds, and its mucous membrane presents traces of inflammation. The intestines contain little else than a greenish mucus, with slight traces of inflammation. The gall-bladder is very much distended with a fluid, yellow bile, mingled with many small, yellow concretions. The spleen is small. The muscles are pale, and easily torn.

Barbe, a Benedictine widow, a native of Martinique, and a negress, thirty-seven years of age, was admitted at the hospital July 14th, 1812, without our being able to obtain the least information respecting her previous condition, mode of life, or the causes and duration of her malady. At the period of her admission, Barbe is emaciated, her eyes are large, haggard, and sometimes threatening. On her arrival, she was placed in bed, was feeble, and her skin dry and hot. She drank much, but was unwilling to eat, assuring us that they wished to poison her. She appeared to tremble with fear, so soon as any one approached her. Her look at length became indirect and uneasy. She drove persons from her, threatened them, called them villains, rascals, and poisoners. She seemed to recognize in us the objects of her hatred, her fears and her fury. She constantly refused to take any thing but water, although she consented to drink a little weak wine with it. July 29th, 1812. Frequent cough, especially at evening, oppression and fever. Blisters to the legs. Aug. 8th. Spitting of blood; pulse feeble, and a well marked paroxysm: at evening cough. Barbe demands with temper, remedies which she does not take. 12th. Prostration, and still greater oppression; blisters do not discharge. 14th. Diarrhœa, limbs swollen. 16th. Saliva greenish, and very fetid, dyspnœa. 17th. Shivering fits, and disappearance of the swelling. 18th. Death took place at six o'clock in the morning.

Autopsy on the morning of the 19th. She is tall, emaciated, and there is a general discoloration of the skin, which is of a dull black color. The cranium is very thick, and of small size. The dura-mater is very thick, and adherent to the cranium; vessels of the arachnoid and pia-mater are injected; the convolutions of the brain are small and close. The brain is soft, and there is serum at the base of the cranium, and in the two lateral ventricles. Adhesions of the walls of the ventricles are very strong, posteriorly; there are slight adhesions with the striated bodies; the capacity of the ventricles is very much diminished, and the vessels of the membrane that invests them are injected. The white substance is injected—the grey substance slightly colored, and the cerebellum soft. The left pleura is adherent throughout a great

portion of its extent, and a mud-like serum effused through the rest of the cavity. The lung is infiltrated and in a state of suppuration, with numerous tubercles in the same condition. The right pleura presents only certain adhesions, but the superior portion of the lung is tuberculous, with some points of suppuration. There is an abundance of serum in the pericardium. The liver is soft, the gall-bladder containing bile. The urinary bladder is greatly contracted, and its walls very thick. The uterus is voluminous but healthy; and the vagina presents traces of leucorrhœa. The mucous membrane of the stomach is slightly phlogosed, and coated with a greyish mucus. The transverse colon is precipitated behind the pubes.

Manceau, a single woman and a seamstress. At thirty years of age she is married and meets with trials, from which mania and melancholy ensue. Several times in the course of the year, she suffers from nervous agitation. At thirty-six years of age, fury is almost continual, and provoked by the slightest opposition. At a later period, she was accustomed to run through the fields with a devotional book in her hand. She was not mischievous. Thirty-seven years of age. Admitted into the hospital June 10th, 1806. She is much emaciated, very wild and furious. Her menses are regular, and her eyes haggard and threatening. She remains habitually upon the bed, yet never using the coverings of it. During the warmest weather, she rises and remains seated upon her heels, always in the same place. She remains by herself, speaks to no one, but provokes all by her abuse. She is very mischievous, and strikes with the intention of doing much injury. She then becomes pale, and her eyes gleam. She is uncontrollable, and still threatens, though surrounded by a great array of force. She is unwilling to labor, but demands permission to return home, because she is very rich. She is insolent, and prodigal of the appellations of robber, rascal, etc. At night she is tranquil. She is very neat. She eats, but her appetite is capricious. Forty-two years of age, Oct. 1811. For some months her menses have been irregular. She is sick, but refuses aid. December. Very copious uterine hemorrhage. Since this time she often remarks that she is sick, and falls into marasmus, without any diminution of her fury. March 6th, 1812. Fever. 8th. Involuntary dejections, adynamic symptoms and fever. 9th. Admitted into the infirmary, where it was necessary to restrain her. Tongue and teeth black, fever, involuntary dejections, thirst. 10th. Respiration frequent, prostration. 11th. Death took place at eleven o'clock in the morning.

Autopsy, 12th. Marasmus, hair grey. Skin brown and sunburnt; œdema of the feet, and scurvy spots. Cranium irregularly thickened, median line turned to one side, parietal protuberances very much enlarged, fossæ at the base of the cranium, unequal. A mass of membraniform blood, over the whole internal face of the arachnoid. Falx reticulated. Vessels of the external lamina of the pia-mater injected, more particularly at the left. Serum between the two laminæ of the pia-mater. Serum at the base of the cranium. Pineal gland presents osseous concretions. The ventricles adhere anteriorly to the striated bodies. Plexuses discolored. Grey substance discolored. Cerebellum very soft. Left lung hepatized, presenting some tubercles, two or three of which are in a state of suppuration. Hydropericardium. Transverse colon depressed even to the pubes. The stomach contracted; its folds presenting traces of inflammation, and the mucous surface coated with a greyish mucus. Intestines inflamed at various points, and of a dark color. Matrix scirrous.

Buel was twenty-eight years of age at the time of her admission into the hospital of the Salpêtrière, Dec. 11th, 1808, in consequence of religious melancholy. The patient still menstruated, but the discharge was scanty. This woman had almost nightly, *defluxions from the head*, and an habitual cephalalgia. She ate little, and remained much of the time in bed. Her delirium

was founded on religious notions, and she was in the habit of saying that she was retained in the house by villians. She treated her companions with contempt, nor did she associate with them, and lived aside and alone. When thirty-one, she no longer complained of cephalalgia, nor did she suffer from defluxions; but became more feeble, and lost flesh, although her appetite was very good. She often coughed. Her complaints were accompanied with menaces, cries and abuse. July, 1812. Thirty-two years of age; defluxion from the head, cough, time in bed prolonged, extreme feebleness. July 14th, admitted into the infirmary. Phthisis, fever. Aug. 6th. Cough, dyspnœa, and febrile paroxysms every evening. 19th. Purulent expectoration, diarrhœa, and œdema of the feet. 21st. Cessation of the diarrhœa, œdema of the hands and feet, dyspnœa, delirium. 23d. Death at 9 o'clock in the morning. 24th. Post-mortem examination. She was tall, hair light, eyes blue, skin white; thoracic members emaciated; abdominal, infiltrated; submaxillary glands enlarged. Cranium thin and hardened, the dura-mater is adherent to the cranium, and that portion which lines the middle fossæ of the base of the cranium is reticulated. There is serum between the pia-mater and the arachnoid. The convolutions of the brain are close, and of little depth. The grey substance is discolored, and a reddish serum is found in the lateral ventricles, whose capacity is very much diminished, by the adherence of their posterior walls. Serum containing flocculi, is met with in both pleuræ, which adhere closely to the lungs. The latter present tubercles, of which some are in a state of suppuration. There is serum also, in the pericardium and abdomen. The liver is granulated in its aspect, and the gall-bladder distended with fluid bile, of an orange color. The alimentary canal is distended by gases, the transverse colon extending even to the pubes. There are certain reddish and even ulcerated points of the mucous membrane of the stomach and intestines; the mesenteric glands are enlarged.

A widow St. D. was thirty-six years of age when she entered the Salpêtrière, Jan. 5th, 1807, in consequence of melancholy, with attempts to commit suicide. Having lost her husband at the age of twenty-eight years, she grieved excessively, and sunk into great mental depression. Though the mother of several children, she immediately became sad and gloomy, and a prey to imaginary terrors. Pursued by her fears, she threw herself from a window, with one of her children in her arms. Though treated at the Hôtel Dieu, and by several physicians, nothing could compose her terrified imagination. At the age of thirty-six years, when admitted into the hospital, she was very much emaciated, remained much in bed, menstruated regularly, ate much, accused herself of divers crimes, and wished to be crucified. She made several attempts to destroy herself. We soon perceived, that she had given herself up to the practice of masturbation. Every winter, she suffered from very severe catarrhal affections, for which she passed several months in the infirmary. Thirty-nine years of age. She appeared to be relieved of her religious terror, and spoke of holy things without dread. There was more connection in her reasonings, but her disposition became insupportable. She complained of, and was dissatisfied with every thing, accusing the persons who served her, with negligence or unkind treatment. She abused every one, vexed her associates, and gave them bad advice. Forty years. During the winter the menses cease. Since that period, she has had a continual cough, and has sensibly grown worse. She frequently suffers also, from a diarrhœa. Forty-one years of age. Oct., 1811, enters the infirmary. There is emaciation, cough, expectoration, fever, and capriciousness with respect to her mode of living, feebleness and night sweats. This woman is not irrational, but sad, taciturn, and very irritable. Jan. 5th, 1812. Serous and fetid diarrhœa, purulent expectoration, a very painful cough, and œdema of the feet. 15th. Extreme feebleness, and alteration of the features of the face; paroxysms every evening.

18th. Incapable of taking solid aliment, the vital forces are sustained with a little broth and wine. Expectoration and alvine dejections very abundant and fetid. 24th. Cessation of the diarrhœa, suppression of the expectoration and dyspnœa. At evening she feels that her last hour is approaching, wishes her waiting maid good night, and dies. 25th. Post-mortem examination. Hair black, emaciation, cranium thin and hardened; the median line dividing the head into two unequal parts. Meninges very much injected, serum between the pia-mater and arachnoid membrane; a reddish serum at the base of the cranium, as well as in the lateral ventricles, whose walls adhere posteriorly. The lungs adhere to the costal pleuræ, and contain tubercles, of which a great portion are in a state of suppuration. The mesenteric glands are enlarged, and several of them are reduced to a puriform substance. The transverse colon extends towards the pubes. The liver is soft and *fat*, and the gall bladder contains very brown bile. The spleen adheres to the diaphragm. There are several ulcerated points upon the mucous membrane of the intestines.

M., forty-three years of age, of an athletic figure, and sanguine temperament, had yielded himself, from his earliest youth, to the control of an unbridled ambition. He had held trusts of great importance; but for sometime, had filled a station of but secondary consequence. This disappointment rendered him sad, without lessening his pretensions. His disposition changed, and he became choleric and difficult in his intercourse with society. He committed errors of conduct, the publicity of which exposed him. He became irritated at the counsels of his relatives and friends, until, at length, his conduct was that of a maniac, although there was no wildness in his conversation. The moment they manifest a desire to oppose this conduct, he becomes furious, and dangerous to all who approach him, even to his family. He was committed to my care. He is tall, his face flushed, eyes injected and shining. He is also loquacious, utters cries, menaces those about him, and uses abusive language. He calls himself a king, and requires the attentions due to royalty; treating with disdain all those whom he meets. These wild pretensions became every instant the cause of new irritations, opposition and outbreaks of fury. He suffers from insomnia, thirst, and constipation. It is easy to perceive, that at times, the patient with difficulty utters articulate sounds. Leeches to the anus and temples renewed; acidulated drinks; prolonged tepid baths. After two months we employ douches of cold water to the head, while the body of the patient is immersed in tepid water. Composure is gradually established. He has lucid intervals; but the conviction that he is a great personage ever remains. At the expiration of five months, the patient becomes fleshy, and the paralysis of the tongue more apparent. He is perfectly calm; his appetite and sleep are excellent, but his notions of grandeur persist. The patient gradually becomes exceedingly fleshy. He walks with difficulty; and it is with no little inconvenience that he makes himself understood. His memory is enfeebled, especially that for things present. We apply at first, a large blister to the neck; then a seton. Valerian, bark and drastics are employed alternately. At the expiration of fifteen months' illness, a frightful attack of apoplexy terminates the existence of the patient. The cellular tissue is surcharged with fat. The integuments of the head are very much injected, as well as the membranes of the brain, which is dense. The liver is *fatty*, and voluminous. The intestines are distended with gases; trichurides are found in the cœcum. The transverse colon having become perpendicular, is concealed behind the pubes by its splenic extremity.

The facts related above, present a pathological phenomenon, which has not yet been particularly referred to. Both the ancients and moderns who have treated of mental alienation, and particularly of melancholy, have all spoken of lesions of the abdominal viscera; but no one, of the displacement of the transverse colon. However, we often find this intestine displaced, in our post-

mortem examinations of the insane. Its direction is now oblique, now perpendicular, so that its left extremity is brought behind the pubes. Sometimes the transverse colon descends in the form of an arc, below the pubes, and within the pelvic cavity. This displacement cannot depend upon a mechanical action, resulting from a thickening of the walls of the colon, or from the accumulation of matters within it; for in the greater number of subjects that I have examined, the colon was empty, and all the membranes composing it, healthy. The same is true of the ascending and descending portions of the colon, which by their traction might draw down the transverse portion. This displacement is not the effect of the last and fatal disease of the patient; for this phenomenon is observed among individuals who have fallen victims to different maladies. The insane, and particularly melancholics, among whom we observe this displacement of the transverse colon, often complain of epigastric pains. They remark, that they experience a pain similar to that which a band would produce, girded about the hypochondria. The dejections are generally morbid. Do not these symptoms furnish an explanation of the displacement of the colon? Had not the ancients by giving hellebore, and the moderns, in prescribing emetics and drastics in the treatment of mental alienation, and especially in melancholy, both by means of evacuants, had for their object, to restore the tone of all the abdominal viscera? Are not laxatives regarded as injurious, because they augment the relaxation? and are we not always exceedingly careful to combine them with tonics? Do not sea-voyages in fine, and exercise on horseback, so useful in melancholy, produce their beneficial effect by strengthening the abdominal viscera?

The knowledge of these facts has appeared to me interesting; 1st, because displacement of the colon is frequent among the insane, particularly melancholics; 2d, because this information may render more sure and rational, the treatment of some cases of disease. The post-mortem examination of one hundred and sixty-eight lypemaniacs, has revealed the following lesions. It proves that a great many melancholics succumb to phthisis pulmonalis; and that alterations of the abdominal viscera are also very frequent; whilst organic changes of the brain are rare; for we should not attribute melancholy to the effusions which we observe in the sinuses and meninges of the brain. We say the same with respect to the osseous concretions, so frequent in the *conarium*, (pineal gland).

TABLE OF PATHOLOGICAL LESIONS FOUND IN THE BODIES OF LYPEMANIACS.

Cranium.	Thickening of the meninges	2
	Organic lesions of the brain	4
	Points of ossification adhering to the falx	3
	Sanguine effusions into the sinuses or substance of the brain	5
Thorax.	Organic lesions of the lungs	65
	Lesions of the heart	11
	Serum in the cavities of the chest	6
Abdomen.	Colon displaced	33
	Adhesion, and suppuration of the peritoneum	5
	Ulceration of the stomach or pylorus	6
	" " intestines or rectum	7
	Intestinal worms	5
	Tenia	1
	Organic lesions of the liver	2
	Biliary concretions	7
	Ulceration of the uterus	6
	Total	168

In comparing the maladies which terminate the lives of lypemaniacs, with those by which the existence of those suffering from other forms of mental alienation is brought to a close; by comparing also the results of cadaveric examinations of melancholics, with those which we observe in the cadavera of those who have been affected by other forms of insanity; one is struck with the predominance of pulmonary maladies among melancholics, as well as with the frequency of the abdominal changes. Lypemaniacs however, like other insane persons, rarely fall victims to acute maladies, but in general, to diseases of a chronic character.

TREATMENT OF LYPEMANIA.

The treatment of melancholy with delirium, like that of other forms of mental alienation, ought not to be limited to the administration of certain medicines. We must, before commencing the use of medicine, be thoroughly convinced, that this is a malady obstinate and difficult to cure; and that moral medicine, which seeks in the heart for the cause of the evil, which sympathizes and weeps, which consoles, and divides with the unfortunate their sufferings, and which revives hope in their breast, is often preferable to all other. We must be well informed of the remote and proximate causes of the disease, and its treatment may be either hygienic, moral or pharmaceutic. Hippocrates and the ancients, the Arabians and the moderns, have all observed, that the state of the atmosphere exercises a remarkable influence over the intellectual and moral faculties of man. A dry and temperate climate, a clear sky, a pleasant temperature, an agreeable situation with varied scenery, are well adapted to melancholics. English physicians are careful to send their melancholic patients into the southern provinces of France and Italy, thus protecting them against the moist and oppressive air of England.

M., a native of Belgium, forty-two years of age, of a strong constitution, and transacting a very large business, consults me at the close of the winter of 1825. Observe the account which is given me by him. "I have always enjoyed good health, am happy in my family,—having an affectionate wife and charming children. My affairs are also in excellent condition. Three years since, I experienced a trifling vexation. It was at the beginning of autumn, and I became sad, gloomy and susceptible. By degrees I neglected my business, and deserted my house to avoid my uneasiness. I felt feeble, and drank beer and liquors. Soon I became irritable. Every thing opposed my wishes, disturbed me, and rendered me insupportable, and even dangerous to my family. My affairs suffered from this state. I suffered also from insomnia and inappetence. Neither the advice nor tender counsels of my wife, nor that of my family, had any more influence over me. At length, I fell into a profound apathy, incapable of every thing, except drinking and grieving. At the approach of spring I felt my affections revive. I recovered all my intellectual activity, and all my ardor for business. I was very well all the ensuing summer, but from the commencement of the damp and cold weather of autumn, there was a return of sadness, uneasiness, and a desire to drink, to dissipate my sadness. There was also a return of irascibility and transports of passion. During the last autumn and present winter, I have experienced for the third time the same phenomena, which have been more grievous than formerly. My fortune has suffered, and my wife has not been free from danger. I have now come to submit myself to you, sir, and to obey your directions in every thing."

After many questions, I offered the following advice. A hospital will not benefit, but on the contrary, injure you. I will refer you to a physician who, during the whole summer will watch over your regimen, and accompany you in your excursions to the environs of Paris. You should bathe often, and from time to time, drink of the Sedlitz water. Your food should be of a ve-

getable character. In the month of September, you should go to Languedoc, and must be in Italy before the close of October, from whence you must not return until the month of May. This counsel was closely followed. At the close of December he was at Rome. He felt the impression of the cold, and the beginnings of a desire to drink were manifest, but shortly disappeared. He escaped a fourth attack, by withdrawing himself from the coldness and moisture of autumn. He returns to Paris in the month of May, in the enjoyment of excellent health. I could relate many similar facts.

The clothing should be warm, and often changed, particularly the stockings; melancholics being particularly subject to cold feet. They ought to proscribe salted, spiced, irritating and fatty articles of food, and all others that are difficult of digestion. Fresh meats, roasted, and chosen from among those of young animals, together with vegetable food, are adapted to this class of patients. They should abstain from farinaceous vegetables, giving the preference to herbaceous legumina and fruits, especially those that contain in the greatest abundance, a mucilaginous and saccharine principle. Such are the red fruits of summer, grapes, oranges, pomegranates, etc. Fernel, Van-Swieten and Lorry, cite examples of melancholics, who were cured by the use of the fruits of summer; they might have added, by the very abundant use of the grape. Exercise, in whatever manner it may be taken, is, without contradiction, one of our great resources, in combating lypemania. Traveling, which acts upon the brain by the impressions which it produces, causing as it were, a multitude of ideas and images, which are constantly renewed, to pass through the mind; necessarily destroys that fixedness of the thoughts and concentration of the attention, which are so trying. Patients who cannot travel, ought to take exercise, and seek for diversions by excursions on foot and by carriage-rides, by corporeal exercises, by the cultivation of the earth, by taking charge of a garden, by family occupations and the practice of some profession. Equitation excites the activity of the abdominal viscera; favors transpiration; reposes and diverts the attention. We sometimes obtain happy results from setting patients to carriage-driving. The Englishman struggles against the spleen, by taking the place of the coachman, and driving through the streets of London. The celebrated Alfieri rendered his deep melancholy supportable, by this means. The chase may be made to fulfil the same indications; but we should be cautious how we entrust arms to those who entertain any disposition to commit suicide. Pinel expresses the wish that all hospitals for the insane should have connected with them a farm, on which the inmates may labor. Doctor Langermann had almost effected this purpose at the hospital of Bareuth, of which he was physician.*

Dr. Horn has provided the insane of the hospital of Berlin, with all the means of exercise, compatible with their security, and he derives from it great advantages. At the Salpêtrière, a good number of our insane women occupy themselves in sewing, knitting, and other manual exercises. Some engage in the cultivation of the garden, and many are occupied in the service of the hospital. These active occupations contribute to the number of cures obtained at this House. It is not so easy to furnish men with the implements of labor, because they may abuse them. Individuals who are not accustomed to any occupation, when there are insuperable difficulties in the way of their traveling, riding on horseback, or by carriage, ought to exercise themselves at games, which repose the mind and fatigue the body. Such are the shuttlecock, tennis, the foot-ball, billiards, etc. But, to exercises of the body, we should join those of the mind. Study contributes to the cure of melancho-

* For more than thirty years, we advised labor, and labor upon the soil particularly. At this day, the precept is every where invoked, and put in practice in Germany, England and France.

lics, provided that they do not apply themselves to objects calculated to exalt the imagination. Sometimes also, we favor melancholy ideas, by what we hope may cure.

M. Charpentier, in his excellent thesis on melancholy, tells us that an ecclesiastic, who had become melancholic, with a disposition to suicide, in consequence of the misfortunes of the revolution, was relieved of this condition, by means of his active efforts in defending the concordat, which was favorable to the independence of the clergy. A man persuades himself that his enemies have stripped him of his whole fortune. He becomes sad, morose, and refuses to eat, because he has nothing wherewith to purchase food. He is sent to Paris. After the lapse of several months, I advise one of his friends to feign a suit, and persuade the patient to consult an advocate. The latter, understanding our object, demands a written memorial, in order the better to understand the situation of his client's affairs. After hesitating for some days, he commences a long account, which requires many excursions, and even short journeys. A month had scarcely elapsed, and even before the memorial was completed, when it became evident that the disease began to improve, the cure of which was speedily accomplished. Alibert relates an analogous case.

Isolation is ordinarily favorable, even when it is absolute. Solitude exercises a mysterious power, which reëstablishes the moral forces that have been exhausted by the passions. Tepid baths prolonged, are of evident benefit, in reëstablishing the transpiration; and all physicians, from the time of Galen to our own day, have boasted of their utility, and diligently recommended their use. The excretions seem to be almost altogether suspended in lypemania; transpiration no longer takes place; and the urine is retained sometimes for one, two, and even five days. Constipation is obstinate, and persists for weeks and months. Forestus speaks of an old man, who was for three months without an alvine evacuation. Such a degree of constipation is not always free from danger, as it sometimes occasions intestinal inflammation. We must overcome it, by means of the quality of the aliments and drinks; by the use of enemata, fomentations to the abdomen, hip baths, etc. Although continence may, in rare instances, be a cause of melancholy; it is not less true, that in some circumstances, the spermatic evacuation has effected its cure. It may be however, that the moral impression has been more favorable than the evacuation itself. It is not easy to establish the degree of influence which, in this act, belongs, respectively, to the physical and moral impression. Aëtius has spoken too strongly of the advantages of coition, which he prescribes as a specific. I can oppose many contrary facts, to the few rare examples that are offered in favor of this view.

In examining the various hygienic means of relief, I have pointed out most of the important rules that are to be observed in the treatment of melancholy. It remains for me to speak of the employment of the passions, in the cure of this class of cases. Nothing is more difficult than to control the passions of man in health. How greatly augmented is the difficulty, when we wish to direct those of the insane! A certain address is necessary, and great skill in seizing upon the infinitely diversified shades, which the application of the moral treatment presents, and to determine upon a fitting opportunity for this application. Now, we must oppose, and conquer the most obstinate resolutions, inspiring the patient with a passion, stronger than that which controls his reason, by substituting a real for an imaginary fear; now, secure his confidence, and raise his fallen courage by awaking hope in his breast. Each melancholic should be treated on principles resulting from a thorough acquaintance with the tendency of his mind, his character and habits, in order to subjugate the passion which, controlling his thoughts, maintains his delirium. Melancholics who are under the dominion of superstition, ought to avoid reading and conversation on subjects veiled in mystery. It is rare that we can

swerve with impunity from this precept. It is generally, after having read books calculated to exalt the imagination, after having given up the mind to exaggerated religious practices, and listened to sermons which lead astray the religious sentiment, that the delirium of melancholy assumes its most fatal character. The cures that are reported, and attributed to religious influence, need proof. I have made many attempts to establish their correctness. I have called to my aid many and very respectable ecclesiastics, but rarely with success. A man is in despair in consequence of not having obtained a certain place, and considers both himself and family dishonored. Religious influences might effect a cure in this case, by producing a diversion in the prevailing ideas, and impressing him with a sense of the vanity of earthly things. A demonomaniac however, does not regard the advice of an ecclesiastic. I have seen insane persons, who were far from religion before their sickness, become, after their cure, sincere believers, fulfilling, with great regularity, the duties of religion. They were convalescent, when they openly embraced a religious life. One of these individuals, a man of great worth, and who for a long time discharged important public duties, was brought to entertain a religious belief, to which he had before been a stranger, by the recollection of what he had experienced during his delirium. When love is the prevailing passion, it is often the case that nothing less than the object beloved will effect a cure; *amore medico sanatur amor*, (Ovid). Every one is acquainted with the cure wrought by Erasistratus, who restored the son of Seleucus, by inducing this prince to sacrifice to his son, his love for Stratonice. Areteus speaks of one Crotoniatus who was cured, only by the possession of the object beloved. If there are insurmountable obstacles to this mode of relief, some physicians have not feared to recommend the counsel of Ovid. A sudden, strong, and unexpected emotion, a surprise, fear and terror, have sometimes been successful. *Spasmo spasmus solvitur*, says Lorry. Means, more or less ingenious, have been devised to remove convictions, and to break the chain of strange ideas. A thousand circumstances may furnish the physician, or bring to mind indications for intellectual and moral therapeutics. The following facts may furnish useful hints. We find them in every collection of cases, and in various parts of this work. Alexander of Tralles, cures a woman who thinks she has swallowed a serpent, by throwing one into a vessel in which she was vomiting. Zacutus tells us, that a young man who believed that he was damned, was cured, by introducing into his apartment, a man disguised so as to represent an angel, who announced to him the pardon of his sins. Ambrose Paré cures a patient who thought he had frogs in his abdomen, by purging him, and putting frogs, by stealth, into his night vessel. A demonomaniac refuses every kind of nourishment, because he thinks himself dead. Forestus succeeds in inducing him to eat, by presenting to him another *dead man*, who assured him that people of the other world eat very well. Alexander of Tralles informs us, that Philotinus undeceived a man who thought he had no head, by causing him to wear a bonnet of lead, whose weight finally informed him of his error. A melancholic believes that he can never again urinate, without subjecting the world to the risk of a new deluge. They inform him that a fire threatens the destruction of the city, and that unless he consents to urinate, all is lost. He decides to comply with their request, and is cured.

A young man is unwilling to eat, because his friends and relatives will be dishonored thereby. One of his friends arrives, all out of breath, and brings a declaration of the government, which frees him from all dishonor. The patient, who had passed thirteen days without food, on receiving this intimation, eats immediately. Pinel relates, that while physician at the Bicêtre, he made up a mock court, which tried a melancholic, who thought himself guilty. This stratagem succeeded, but its success was short, in consequence of the

imprudence of one of those who were in the secret, who informed the man that we had made sport of him. The same author relates in his *Treatise on Mania*, many examples of monomaniacs, whose imaginary fears and obstinate repugnances had yielded to a real fear, caused by the appearance of a great degree of constraint. Pain has also triumphed over the obstinacy of some patients.

A lady was committed to my care, who thought that she was damned, and had the devil in her, and was cured, through fear of cold baths, which she dreaded beyond measure, and with which she was threatened, every time that she abandoned herself to her peculiar notions and chimerical fears. We succeed also, by persuading lypemaniacs that they have no possibility of accomplishing their design. Thus, a young person, who had been disappointed in a love affair, having, for seventeen days, refused to take food, in order to terminate her existence, was restored to health, after being obliged to take food by means of the tube, and had become satisfied, that in spite of all her efforts, they could nourish her, and prevent her dying of hunger.

I have seen the substitution of one passion for another cure lypemania, by addressing itself to the self-love of the individual, arousing and exalting it. I have silenced imaginary terrors thereby, and have seen love take the place of delirium depending on melancholy, in the case of two or three young lypemaniacs of the Salpêtrière. We should be cautious in the employment of fear, and especially terror; as these passions produce a sedative action, which may occasion the gravest consequences. The effects of music, to which the ancients have attributed so many miracles, is more beneficial in melancholy than in other forms of mental alienation. Galen assures us, that Æsculapius was accustomed to cure diseases of the mind, by songs and harmony. We read in the history of music, and in the writings of physicians, examples of cures effected by this means. In order to render it efficacious, we must employ a small number of instruments, and select airs adapted to the condition of the patient. The treatment which applies itself directly to the organic sensibility, and which we call physical treatment, when it is seconded by hygiene, and is not directed by empiricism, but by systematic views, certainly contributes to the cure of lypemania: for if this malady is often produced by the moral affections, it is also, by physical derangements. It is the result of observation, that all forms of mental alienation, and melancholy in particular, offer the best chance of cure, when the physician can perceive some disorder in the functions of assimilative life.

Let us suppose the nature of the pathological causes which have produced melancholy, to be fully understood; our therapeutic views will be directed in accordance with this information. If there be suppression of the menses, or hemorrhoids, we must reëstablish these evacuations; if the retrocession of herpes, we act upon the skin, etc. It would be superfluous to enter into details, as physicians are aware that they often have to do with melancholy depending upon similar causes. It is not always easy to go back to causes so evident; and lypemania is treated conformably to the theories and systems that have prevailed, at different epochs of medicine. The ancients, regarding this malady as produced by bile, black bile, or a corroding humor, employed evacuants, especially purgatives. Hellebore was the remedy preferred to all others, in melancholy, and its use has passed into a proverb. That of Anticyra was preferred to any other. Celsus recommends the white hellebore in gay or cheerful monomania, while he prescribes the black in lypemania, or melancholy with sadness. Some moderns have desired to return to the use of hellebore. They propose to purge with it: but we do not want for other medicines, better known, more sure and less dangerous; for practitioners who extol extravagantly the use of this root, by no means accord to it a specific virtue. Pinel confines himself to gentle laxatives, or mild purgatives. The

chicoria, and saponaceous plants, combined with certain neutral salts, are sufficient to obviate constipation, whether it announces an attack or paroxysm, or complicates the melancholy. At the commencement of lypemania, emetics and emeto-cathartics are very useful. We find it well also, to maintain an artificial diarrhœa, when the strength will permit it, thus imitating nature in one of her means of cure. Enemata, more or less irritating, also produce some benefit. Evacuants are adapted chiefly to that form of melancholy which is characterized by supineness, an aversion to action, and torpor of the functions.

We administer the Tartrate of Antimony and Potassa, in small and repeated doses, either for the purpose of relieving irritation, or to act upon the imagination of patients who think themselves well. The gastric or intestinal pains which they experience, attract their attention, persuade them that they are sick, and determine them to employ suitable remedies. With some melancholics who refuse every kind of medicine, we employ energetic substances in a small volume, and cause them to be taken without the knowledge of the patient, mingled with his food or drinks. Such are gamboge, scammony, jalap, aloes, calomel, etc. Darwin has lately added to our list of remedial agents, a machine, which he denominates a rotatory machine, the effect of which is to produce abundant evacuations, both by the mouth and bowels. Some English physicians, among whom are Mason Cox, and Haslam, boast greatly of the happy effects produced by this machine, of which I first caused a model to be made in France. Some physicians have feared lest the use of it might be more injurious than useful. It provokes epistaxis, occasions fears of apoplexy, prostrates the patient exceedingly, produces syncope, and exposes to other accidents, more or less alarming in their character, which have caused it to be rejected.

Pursuing the atrabile into the circulation, the humorists deduce from blood-letting a general precept against melancholy. Areteus alone among the ancients, expressly defends it in the major part of cases. He permits it however, only among young subjects, in the spring, and in small quantities. Cullen says, that blood-letting is rarely useful. Pinel employs it very little. Nevertheless, we may have recourse to local sanguine evacuations; now at the epigastrium, when the stomach is the seat of an active irritation; now, to the vulva, when we wish to reëstablish the menstrual flux; or to the anus, when we desire to renew a hemorrhoidal discharge; and finally to the head, when there are signs of cerebral congestion. I have sometimes applied leeches with success to the side of the head, when lypemaniacs complained of a fixed pain in the part. Lypemania does not always present itself in connection with symptoms, which indicate a predominance of the abdominal system, or turgescence of the sanguine system. Sometimes the nervous system appears to be alone the cause of all the difficulty; and Lorry first correctly viewed and admirably described the character of this form of melancholy, which he most clearly distinguishes from that depending upon physical causes. In this form of melancholy, vulgarly called nervous, but by Lorry, melancholy not depending upon a physical agency, evacuants augment the evil. The physician should endeavor to modify the sensibility, and to calm the nervous excitement by hygienic measures already indicated; by soothing drinks, by narcotics, by opium, by the use of water in vapor, in douches, by baths and affusions. The tepid bath is more or less prolonged, sometimes for several hours. The bath, by immersion in cold water, is useful when melancholy depends upon onanism. Affusions of cold water, by determining a nervous reaction to the surface, causes the internal spasm to cease, and brings about a happy termination of the malady. The douche acts in a similar manner, besides that, in the hands of an experienced physician, it may have a moral influence over the patient, and oblige him to renounce resolutions, both dangerous and

fatal. Some physicians, and particularly Teden and Leroi d'Anvers, have recommended the internal use of very large doses of cold water. They regard it as an almost infallible remedy against the disposition to suicide. The ancients made a very free use of narcotics. Lazare Riviere boasts of the good effects of opiates. Odier* states, that he cured a case of melancholy by the use of opium, gradually carried to the extent of thirty grains, and combined with an equal quantity of musk. We should not employ this article among plethoric individuals, or those disposed to sanguine congestions. Some enthusiasts have employed magnetism in the treatment of melancholy; and what have they obtained? Results slightly advantageous, if not altogether doubtful. I have also made experiments with it, but have not obtained a single cure.

After having rapidly unfolded the general considerations, which the study of lypemania, or melancholy with delirium presents, we ought to indicate the varied forms which the delirium of melancholy assumes; but who could point out all these varieties? Are they not as numerous as the modifications that the sensibility can experience? Do they not borrow their characters from some one or other passion, unduly excited by the imagination? Although the cause of the disease remains always the same, the features which characterize each case of the affection, change and diversify themselves to infinity. I shall speak of a very small number of varieties only, which give rise to considerations of the highest interest.

[The treatment of this form of mental disease recommended by our author, will be found to correspond for the most part with that pursued by the profession in this country, and is quite at variance with the expectant plan, so popular with French practitioners The hygienic course which he advocates, is proved, both by examples given by himself, as well as by a sufficient amount of evidence elsewhere furnished, to be of incalculable value to the lypemaniac. In his remarks on "Moral Influences," we regard his veiws as particularly happy. In his graphic description of the mental condition of this unfortunate class, he touchingly appeals in their behalf, to that sympathy and forbearance in our intercourse with them, which under all circumstances of affliction are so welcome, and the more, when a diseased and debilitated frame, is coupled with the depressing emotions. No apprehensions are more real, no fears more intense, no belief more honest, no convictions more strong, than those which torture the victim of melancholy. His imaginary notions, are to him awful realities; and I am safe in saying that no other form of suffering can for a moment compare with this. Would all the mortification and regrets incident to ruinous reverses, induce the tender mother to raise the weapon of death over the head of her innocent offspring? Would she not rather bless God that this precious treasure was still spared to her? Yet the perverted maternal sentiment, leads but too frequently to the commission of acts, which the mind shudders to contemplate. Now the early symptoms of the malady which result in a catastrophe so deplorable, are known by the common name of "hypo," and are regarded as an infirmity which the unhappy sufferer may at any time shake off. Hence that indifference, the cold look, and not unfrequently, the harsh and unfeeling expression, which augment the agony which he now endures. From the first, the tenderest sympathy, those hygienic influences and medicinal agents, which are best adapted to restore the exhausted energies, and overcome disordered organic functions, are demanded; and if we fail in giving to each and every one of them its full measure of influence at an early day, we may see our unhappy friends doomed to a life of suffering which no pen can describe. The table which furnishes an account of the pathological lesions, found after death in one hundred and sixty-eight cases, is probably the most valuable of any, in this depart-

* British Library, Geneva, 1816.

ment on record; both as furnishing a more satisfactory statement of the pathology of lypemania than any other, and as a consequence, the most appropriate mode of treatment. The number of post-mortem examinations made in the hospitals for the treatment of insanity in this country, are very few, and of this number fewer still are ever published. The cause is evident, and is not likely very soon to be obviated; a circumstance which gives additional interest and value to the table referred to. With respect to the medical treatment, it may be proper to remark, that drastic purgatives are very rarely requisite, and general blood-letting still less so; while to obviate local congestions, topical depletion may sometimes be proper.]

DEMONOMANIA.

Origin, history and signification of term.—Origin of religious melancholy.—Stellar and lunar influence.—Influence of the doctrine of the Platonists on mental alienation.—Origin of conjurations, sorcery, magic, witchcraft and astrology.—Influence of Christianity on the form and treatment of insanity.—The effect of the reformation of Luther and Calvin.—Mode of dissipating the errors which led to this form of insanity.—Analysis of symptoms of this malady, compared with those that attend other forms of melancholy.—Case.—Post-mortem examination.—Cases.—Sometimes epidemic.—Examples.—Demoniacal possession rarely occurs before puberty.—Women more subject to this disease than men.—Causes, physical and moral.—Its access generally sudden.—Demonomaniacs usually emaciated, etc.—Exhale a strong odor.—Ecstasies common, and modified by various circumstances.—Demonomaniacs suffer from hallucinations and illusions.—Case.—Tenacious of their delusions.—Examples.—Tests of demoniacal possession.—Death often hailed with joy by the possessed.—Convulsions not uncommon.—Important conclusions.—Suicide much to be feared in this form of insanity.—Of all insane persons, lypemaniacs are the most cruel.—Treatment.—Medical.—Moral.—Zoanthropy.—Lycanthropy.—Fatalists, or believers in destiny.—Several strange views referred to.—Examples, with a post-mortem examination.

The word demon among the ancients, was not understood in a bad sense. It signified the Divinity, a tutelary Genius, a guardian Spirit; *δαίμονιον*, is derived from *δαίμων*, sapiens, sciens. Plato assigned this name to that Spirit with whom the Supreme Being intrusted the government of the world. The Jews, after the Chaldeans, attributed almost all diseases to the agency of spirits or demons. Saul is troubled by an evil spirit; Job is the sport of a demon. The dysentery which smote Joram, was referred to the same cause. Nebuchadonosor is seized with lycanthropy by the command of God. Is it astonishing that hysteria, epilepsy and melancholy are called *sacred?* The Greeks also, charged the spirits with being the cause of the major part of their diseases. Herodotus affirms, that Cleomenes did not become furious in consequence of the presence of demons, but because he was intoxicated with the Scythians. Aristophanes denominates the most intense degree of fury, not *μανία*, but *κακοδαίμονία*. By preserving the primitive signification of this word, we should have given the name of demonomania to religious melancholy. The first variety of this form of insanity would have designated that class of the insane, who believe that they are God, who imagine that they have conversations and intimate communications with the Holy Spirit, angels and saints, and who pretend to be inspired, and to have received a commission from heaven to convert men. This species would have been denominated *theomania;* while the second would have been called *cacodemonomania,* and

would have embraced all those unfortunate beings who fancied that they were possessed by the devil, and in his power; who were convinced that they had been present at the imaginary assemblies of evil spirits, or who feared damnation, and the misery of eternal fire. This classification would present, in a single variety, all those forms of delirium which have reference to religious beliefs. It would place in opposition all the varieties of religious melancholy; while the religious, gay and bold forms of delirium, attended with pride and exaltation of the faculties, would be, so to speak, placed in comparison with the sad and timid forms, attended by despondency and terror. But the word *demonomania* is appropriated; and the public would charge me with neologism, were I to restore it to its etymological signification.

Man, dependent by his organization upon external influences, and passing alternately from well-being to sorrow, from pain to pleasure, and from fear to hope, was naturally led to reflect upon the nature and relations of good and evil. He soon admitted the existence of a good being, and a malevolent spirit, which presided over his good or ill fortune. A step more only, and a system of theology was formed. Religion was now, gentle and full of consolation; now, she assumed a severe and threatening tone. But sorrow having pervaded almost the entire existence of man, and pain being more extensively prevalent in the world, ideas of a depressing character predominated. From sadness, to fear and terror, there was but a step. These sentiments inspired in the earliest period of the world, a sort of religious melancholy, depending upon those fearful terrors that had their origin with the birth of the world. Religious melancholy was, therefore, of all forms of mental alienation, the most general and extended. The sacred books of every people present examples of it. When man, abandoning the worship of the true God, fell into idolatry, the first objects of his adoration were the stars. (Newton, chronol.) These most strongly impressed his senses, and exercised over him the most active and long-continued influence. Religious melancholy was regarded as dependent upon the course of the stars, and its periodicity strengthened this belief. The insane were called maniacs, a word derived from *μηνη*, *luna*, *lune*, from which the Greeks made *maniacs*, moon-struck, and the Latins *lunatics;* an appellation which is still maintained in England, and also in France, in the language of common life. When the doctrine of spirits, taught by the Platonists, at length complicates their theological notions, nervous maladies, and particularly mental alienation, being sacred diseases, were attributed to the agency of spirits and demons. Among the insane, some were gay, bold and rash, regarding themselves as inspired. They believed themselves fortunate, and the friends of the gods; and presented themselves, or were presented to the people, as those sent from heaven. They also uttered oracles on their own, and on account of the priests. Others, on the contrary, sad, timid, pusillanimous, fearful, and pursued by imaginary terrors, pronounced themselves condemned forever. They were treated as objects of celestial wrath, and regarded themselves as devoted to the powers of hell. Meleager, Œdipus and Orestes, and many other illustrious subjects of divine wrath, were pursued by furies. These were true lypemaniacs.

Disquietude, fear or fright, modified or changed the nature of all. They deemed it necessary to deliver themselves from some extraordinary evil, or to turn aside the vengeance of the gods. They desired also to read in the future, what they were to fear or to hope for. They evoked the souls of the dead, after having consulted the oracles and stars. The followers of Orpheus gave birth to the science of conjurations, sorcery, and many other mysterious practices. Magic and witchcraft formed a part of their religious worship. Sovereigns, legislators and philosophers, were initiated into the mysteries; some, to extend the sphere of their knowledge, and others, from motives as shameful as criminal. Astrology, magic and witchcraft, all children of fear, so enchain-

ed the imagination of men, that we need not be astonished, says Pliny, that their influence lasts so long, and has extended to all ages, regions and people. Christianity, by recalling religious views to the unity of God, by causing oracles to cease, and by enlightening men, rendered sacred the opinions of Plato and Socrates, respecting the existence of demons, and wrought a great revolution in the sentiments of men. They exaggerated the power of spirits over matter, and the fear of yielding to the instigations of the devil, created dread. They believed that from the commencement of this life, they were in the power of demons, and the number of demonomaniacs multiplied. This, the institution of exorcisms in the primitive church establishes. They had recourse to ceremonies and prayers to deliver the possessed, but did not burn them. They established, in several cities, solemn feasts for the cure of the possessed. They were accustomed to assemble in a church all the insane of a country, whither they came from the most remote regions. The concourse of people, assembled from every quarter, the presence of the bishop, the pomp and solemn display, the confidence which took possession of the sick, and every thing that could control their imagination, contributed to the cure of some of these unfortunate beings. They proclaim it a miracle, and this persuasion prepared new cures for succeeding years. These solemnities, which, in some cities of France were still celebrated so late as the middle of the last century, must not be confounded with what they called the *feast of mad-people*, a strange saturnal, which took place in certain chapters, during the fourteenth and fifteenth centuries.

When the impetuous Luther, on pretext of removing abuses, attempted to revolutionize the church in order to avenge his quarrels, religious discussions became the subject of all conversations, of all sermons, and even of all political reports. The diverse parties, reciprocally menaced each other with eternal damnation. Fanaticism was aroused, and religious melancholy added to all those ills that innovations had provoked. Calvin augmented them still more. We see none but the excommunicated, the condemned and wizards. The public were alarmed, created tribunals, the devil was summoned to appear, the possessed were brought to judgment. They erected scaffolds, and kindled funeral piles. Demonomaniacs, under the name of sorcerers and possessed, victims in a double sense of the prevailing errors, were burnt, after having been put to the torture in order to induce them to renounce their pretended *compact* with the devil. In these unhappy times, such was the mania for attributing every thing to the agency of the devil, that Pierre de l'Ancre, not being able to comprehend how a rock, situated near a village of Asia, called *Arpasa*, of which Pliny speaks, and which, like the rock of Cydobre among the Albigenses, moves when one touches it with the end of the finger, while the most powerful efforts failed in producing this result, attributes this phenomenon to the power of a demon. G. E. Stahl* relates cases of grave maladies, which were regarded as the work of the devil.

Were this the place for it, I could prove that the insane had been employed to utter oracles, and that the priests knew how to inspire themselves with a holy delirium. I shall show farther on, that demoniacal possession is a true monomania. Demons became mute from the time that Christianity shed its benign influences abroad over the world†. They ceased to plague men, so soon as men ceased to fear. They no sooner ceased to burn sorcerers and magicians, than the imagination became composed, and no longer gave birth to either of them. Many now fear the police, as they would formerly have done the stars and demons. This fear is so much the more intense and fatal, as the police acquires more influence in times of trouble and civil dissensions;

* Collegium causale sic dictum minus. Swidnitū, 1734, in 4to.
† Fontenelle, History of Oracles, in 12mo.

and we shall no longer be surprised, if in hospitals for the insane, demonomaniacs are replaced by a class which fears the police, prison and punishment. It is ever the weakness of the human mind, pusillanimity, disquietude and fear, which acts upon these unfortunate beings, producing such results as were formerly regarded as demoniacal possession. That man is now in a madhouse, because he fears the police, who would formerly have been burnt because he feared the devil.

Physicians, and some men of superior wisdom, have, in all times, combatted the prejudices which caused the true sources of nervous maladies and mental alienation to be overlooked. Hippocrates or his disciples, in the treatise "*On the Sacred Disease,*" assures us, that there can be no maladies caused by the gods. Areteus expresses the same sentiment. *De causis morb. diut,* lib. I. The report of Marescot, Riolan and Duret, respecting the possession of Martha Brossier, is a model of sound reason and wisdom. They reduce their opinion to these memorable terms: *nihil a demone; multa ficta, a morbo pauca.* "Nothing from the devil; many things feigned: few things from disease." Cardan, Corneille Looz, Joseph Duchêne, Bekker, Pigray, Bayle, Naude and Mead, defended these unfortunate beings against both the prejudiced and the Del-Rios, Bodins, Pierre de l'Ancres, etc. Malebranche, whose opinion should not be suspected, speaks with a noble boldness.* Parliaments, under the presidency of Seguier, annulled many decrees, which condemned to the flames both sorcerers and the possessed. All have read that beautiful passage of Aguesseau, where this celebrated magistrate says to parliament, that in order to cause sorcery to cease, all that is necessary is, no longer to speak of sorcerers, and to attribute no kind of importance to the matter, but to commit, without noise, to the physicians, the wizards, who were "more sinned against, than sinning." Both sorcerers and the possessed were, in fact, often the victims of impostors, who made traffic of the ignorance and superstition of their fellow creatures. They were imbeciles, melancholics and hysterical persons, who were believed to be possessed, because they had been threatened with demons and wizards; and judges doomed these unhappy beings to the flames. A jurisprudence existed, having reference to sorcery and magic, as laws were enacted against robbery and murder. The people, seeing both Church and prince believe in the reality of these extravagances, remained invincibly persuaded. The more they pursued sorcerers and the possessed, and the more ceremony attended their punishment, the more was the number of these persons augmented, by exciting the imagination, and occupying it with chimerical fears. A better education and the progress of knowledge, have gradually dissipated these fatal errors, more successfully than funeral piles, or legal code and digest.

Though demonomania may be unusual at this day, it will not be uninteresting to point out and determine its characters. If the possessed no longer exist, there are still some monomaniacs who consider themselves in the power of the devil. I have collected certain facts respecting demonomania, and have compared them with what demonographers have related. Their resemblance has satisfied me that the symptoms that I observed are the same, with the signs of possession pointed out by authors, or contained in the accounts of the trials of sorcerers and those possessed. After having given a brief history of demonomania, we will pass on to an analysis and comparison of the symptoms of this malady, with those that attend other forms of melancholy.

A. D., a servant woman forty-six years of age, was of medium size, had chestnut colored hair, small hazel eyes, a dark complexion, and an ordinary degree of fulness of habit. Endowed with great susceptibility, she has much self-esteem, and was religiously educated. Fourteen years of age. First

* *Researches Concerning Truth;* Paris, 1762, 4 vol. in 12mo.

menstruation, and since that period the menses have been scanty and irregular. Thirty years. She becomes attached to a young man, whom they will not permit to marry her. She becomes sad and melancholic, believing herself abandoned by every body. The menses cease, not to appear again. She engages with extreme ardor in devotional exercises, makes a vow of chastity, and devotes herself to Jesus Christ. Sometime after this, she fails in her promises, and remorse seizes upon her. She regards herself as condemned, given over to the evil one, and suffers the torments of hell. Six years she passes in this state of delirium and torments; after which, exercise, dissipation and the influence of time, restore her to reason and her ordinary occupations. Forty years of age. Forsaken by a new lover, D. renews her vows of chastity, and passes her time in prayer. One day, while on her knees reading the imitation of Jesus Christ, a young man enters her chamber, says that he is Jesus Christ, that he has come to console her, and that if she will but trust in him, she will have no longer occasion to fear the devil. She yields. For the second time she considers herself in the power of the devil, and experiences all the torments of hell and despair. Sent to the Salpêtrière, she spends most of her time in bed, groaning night and day, eating little, continually complaining, and relating her misfortunes to all. Forty-six years of age, March 16th, 1813. This woman is transferred to the infirmary for the insane. Her emaciation is extreme, skin earthy, face pale and convulsive, the eyes dull and fixed; the breath fetid, the tongue dry, rough, and interspersed with whitish points. She refuses nourishment, although she says that she is tormented by hunger and thirst. There is insomnia, together with a small and feeble pulse, head heavy, with a burning sensation internally, and a feeling as if bound with a cord externally. There is a painful constriction of the throat, and she is constantly rolling up the skin of her neck with her fingers, and crowding it behind the sternum; assuring us that the devil draws it, and that he strangles and prevents her from swallowing any thing. There is considerable tension of the muscles of the abdomen, attended by constipation; and upon the back of the right hand and left foot, are scrofulous tumors. The devil has extended a cord from the sternum to the pubes, which prevents the patient from standing up. He is in her body, burning and pinching it. He also gnaws her heart, and rends her entrails. She is surrounded by flames, and in the midst of the fires of hell, though we see them not. No one may credit it, but her ills are unprecedented, frightful, eternal. She is damned. Heaven can have no compassion upon her.

April, 1813, diminution of the vital forces. The patient sees no one who approaches her. Day appears to her a light, in the midst of which wander spectres and demons, which reproach her for her conduct, threaten and maltreat her. She refuses all consolation, and becomes irritated if we persist in offering it. The assistance of the ministers of religion is useless, and the aid of medicine rejected. This malady being never seen, men can do nothing; a supernatural power is necessary. She curses the devil, who burns and tortures her, and God, who has cast her into hell. May 1813; marasmus, abdominal members retracted upon the abdomen; decline of the vital forces, though the patient often says that she can never die. May 25th; tongue brown, burning heat, difficult respiration, thirst, pulse small and contracted. May 30th: feet swollen, chills at irregular intervals, though she has at the same time sensations of heat. Mournful groans. June 6th. A serous diarrhœa, feet swollen at times, the cheeks very much flushed, the tongue black, the skin earthy, pulse very small and frequent. June 15th: prostration, eschar over the coccyx, delirium the same. June 21st: aphonia, respiration frequent, pulse scarcely perceptible; the same groans, the same delirium, and conviction that she should not die. June 22d. Death took place at seven o'clock in the evening; for two days previous to this event, she could execute no movement, and swallowed nothing.

June 24th. Post-mortem examination: marasmus, feet edematous, lower extremities retracted, eschars on the coccyx and sacrum. Cranium thickened anteriorly, diploe injected. Falciform fold of the dura-mater reticulated, and torn anteriorly. Serum at the base of the cranium. Some points of ossification in the Pineal gland. Cerebrum and cerebellum softened, grey substance pale. Serum abundant in the two lateral and third ventricles; plexus chorrides discolored, having many small, serous cysts. Very extended adhesions of the posterior portions of the two ventricles. Lungs tuberculous, and adherent throughout their whole extent to the pleuræ. A small quantity of serum in the pericardium, to which the right auricle and point of the heart adhere. Epiploon atrophied, and interspersed with small black points, as was also the peritoneum throughout its whole extent. All the abdominal viscera, adhering closely together, form but a single mass of a brownish aspect; mesenteric glands very much developed, and some of them, as large as hazel nuts, are converted into adipocere. The gall-bladder contains little bile, the spleen is reduced to the consistence of pap and the color of lees of wine; the mucous membrane of the intestines is ulcerated in several points, and that of the urinary bladder reddish. The forehead is retreating, and very narrow from temple to temple. The excessive flattening of the coronal region, gives to this profile one of the characters which have been pointed out as proper to idiocy.

M., now forty-nine years of age, living in the country, and a wool-spinner by occupation, had often heard accounts of sorcerers. At fifteen years of age, the menses appear spontaneously. Thirty-seven. When on the point of marriage, she learns that her pretended lover is deceiving her. She will no longer listen to him, and a year after marries another person. He whom she has forsaken, threatens her with vengeance, and dooms her to the dwelling place of devils. A man in the village where she resides, who passes for a sorcerer, gives his body, without the least doubt on her part, to the devil. At forty years of age the menses cease. At this period her ideas become deranged, but in a manner imperceptible to strangers, and she suffers from cephalalgia. Forty-two years. Returning from a long excursion, she is fatigued, and lies down upon the earth to refresh herself. Shortly after, she experiences in her head a motion and noise like that of a spinning wheel. She is frightened, but nevertheless resumes her course, and on the way, is raised from the earth, to the height of more than seven feet. Having reached her place of residence, she can neither eat nor drink. She calls to mind the threat that had been made with reference to her, four years previously, and no longer doubts that she is bewitched. Many remedies are administered, and she makes prayers, performs devotions of nine days' duration, and also pilgrimages. She wears a stole, which had been presented her by a priest. But all in vain. The devil and his torments no longer leave her, and three years afterwards, she is brought to the Salpêtrière.

At the time of her arrival at the hospital she is extremely emaciated, her skin is sun-burnt, earthy, and hot; the pulse it feeble and small, the head is bowed down, the face bloated, and the forehead wrinkled. The eye-brows, at times mingling with the folds of the forehead, are lost in the hair: the abdomen is hard and voluminous, and the patient has her hand constantly upon it. She assures us that she has, in her uterus, an evil spirit, in the form of a serpent, which leaves her neither day nor night, although her organs of generation are not like those of other women. She complains of a great degree of constriction about the throat, and experiences a necessity to walk about, and suffers much more acutely if prevented from doing so. She walks slowly, speaking in a low tone of her condition, which she deplores. She conceals herself when she eats and drinks, as well as when called to evacuate the bladder and bowels, in order the better to persuade us that she is not a body, but merely a spectre and imaginary being.

"The devil has taken from me my body, and I have no longer a human shape. There is nothing so dreadful as to appear to live and yet not to be of this world. I burn, sulphur exhales with my breath. I neither eat or drink, because the devil has no need either of food or drink. I feel nothing, and should I be placed in a terrestrial fire, I should not burn. I shall live millions of years; that which is upon the earth not being able to die. Were it not so, despair would have caused me, long since, to terminate my existence."

Nothing undeceives her, and she is abusive in her language to those who seem to doubt the truth of what she affirms. Those who contradict her, she calls sorcerers and demons. If they insist upon the correctness of their opinion respecting her, she becomes irritated, her eyes project, and are red and haggard. Look then, she says, at this beautiful figure; is it that of a woman or a devil? She strikes herself violently with her fist upon her chest. She pretends also, to be insensible, and to prove it, pinches her skin with all her might, and strikes her chest with a wooden shoe. I have myself pinched her, pricked her often with a pin, and transfixed the skin of her arm, without her testifying the least suffering. Still she manifested pain when not forewarned. This woman is tranquil, is not mischievous, and speaks rationally upon every other subject, when we can divert her thoughts. On pretext of delivering her out of the power of the devil, and unbewitching her, she was thrice magnetized, but without my being able to witness any magnetic effect.

H., fifty-one years of age, and a pedler by occupation, menstruated only after the age of twenty-four years. She is subject to a headache and colic pains, and is the mother of three children. At the age of thirty-six years, and during her last pregnancy, she was accustomed to read the Apocalypse, and books which treated of ghosts and wizards. She was often frightened by these readings. Her last confinement was laborious, and she afterwards had several fainting turns. From time to time, she seemed to see flames. When thirty-seven years old, she borrows some money to oblige a relative. The creditor harasses and threatens her. Distressed by this debt, and while walking in the garden connected with her residence, the devil appears to her, proposes to her to sign a paper with blood drawn from the little finger of her left hand, and promises her the sum of money she owes. After a long debate, she writes out her renunciation of God, and her voluntary sacrifice to the devil. No sooner has she committed this act, than the earth trembles beneath her feet and around her. Her house also, is encompassed by a whirlwind, which shakes and injures its roof. At this instant, the evil spirit disappears, carrying away with him her real body, leaving only a phantom. All her neighbors were the terrified witnesses of these phenomena. Her real body being with the devil, its image is tempted to throw itself into the water, and to strangle itself. The devil incites her to divers crimes. Feeling that she was devoured by the fires of hell, she threw herself into a pond, and suffers more since than before. She has no blood, and is absolutely insensible. I pierced through the skin of her arm with a pin, but she appeared to experience no pain in consequence of it. I shall remain upon the earth, says she, until wise men have discovered a means of obliging the devil to bring back to the earth my natural body. All that I say was taught me by the body which no longer exists, but which, before my misfortune, was upon the earth.

This woman is very much emaciated, her skin very brown and sun-burnt. Grief and despair are depicted upon her countenance, which is wrinkled and contracted. She walks about quietly, knitting, and avoids her companions. She does not regard herself as sick, but groans about her miserable condition, which nothing can change. She is tranquil, supports opposition, and has a great desire to be relieved of her infirmity. Cherishing this hope, she has four times consented to be magnetized, without however, deriving the least

possible effect from the operation. With the expectation that her portrait would be carried to the archbishop, she places herself in a very proper attitude to have it taken. Such was the condition of this unfortunate woman for twelve years. During eleven of them, she performed laborious services, fulfilling her duties very satisfactorily. For one year only, did age and wretchedness compel her to enter the Salpêtrière.

L. is fifty seven years of age, a laundress, and has been very devout from infancy. Menstruation commences at the age of fifteen years. At the age of seventeen she is married, and becomes the mother of fifteen children. When forty-six years of age, she loses her husband and one of her children, which expires in her arms; since which period, there have been anomalies with respect to menstruation. Near this time, she indulges in religious scruples; accuses herself of having partaken of the sacrament unworthily; takes an exaggerated view of religious exercises; neglects her occupations; and passes her time in the church. There is insomnia. She groans, and stands in fear of hell. Fifty-two years of age. Cessation of the menses. Her fears are converted into religious terror, and she believes herself to be in the power of the devil. Fifty-four years of age; fever and delirium. She throws herself from the window, and is sent to the Hôtel-Dieu, from whence, after five months, she is transferred to the Salpêtrière. Extreme emaciation, skin sunburnt, earthy, and complexion sallow. Expression of countenance restless. The whole body is in a sort or vacillation and continual balancing. She is constantly walking about, seeking to do mischief; to strike, to kill.

"For a million of years I have been the wife of the devil. I know that I am with him; for he lodges with me, and ceases not to say to me, that he is the father of my children. I suffer from uterine pains. My body is a sac, made of the skin of the devil, and is full of toads, serpents, and other unclean beasts, which spring from devils. I have no occasion to eat (though she eats largely). All that is given me is poison. I should long since have been dead, were I not the devil. For more than twenty years I have had no alvine evacuation. I have committed every kind of crime; have slain and robbed. The devil is continually telling me to slay, and even to strangle my children. In one minute, I commit more crimes than all rogues have committed in a hundred years. Hence I am not sorry to wear a strait waistcoat; for without this precaution, I should be dangerous. In giving myself away to the devil, I have been constrained to devote my children to him. But in return, I have required the devil to bring low, him that sits on high; to slay God, and the Virgin. When I was accustomed to receive the sacrament, I treated with contempt the good God of the Church. I no longer believe in him; it is no longer necessary for me to do so. It is no longer necessary to make confession, the devil forbids."

L. remains aside, avoids her companions, fears lest she shall do them harm, talks to herself, sees the devil on every side, and often disputes with him. This unhappy being presents an example of demonomania, complicated with dementia and fury. The strangest illusions and hallucinations maintain her delirium, and provoke acts of the blindest fury.

S., forty-eight years of age, is devoured by two demons who have taken up their abode in her haunches, and come forth through her ears. Devils have made several marks upon her person, and her heart is daily displaced. She shall never die, though the devil may tell her to go and drown herself. She has seen the two devils by which she is possessed. They are cats; one of which is yellow and white, and the other black. She puts tobacco, wine, and particularly grease, upon her head and in her ears, to exorcise the devil. She walks constantly with naked feet in fair and rainy weather, and while walking, picks up whatever comes in her way. She mislays her clothing, eats largely, and the dejections are involuntary. She sleeps not, is filthy, emaciated, and

her skin very much sun-burnt. There is no coherence, even in the system of ideas that constantly occupy her mind. She articulates sounds with the greatest difficulty. This is a striking case of demonomania, which has degenerated into dementia, complicated with paralysis.

I may be censured for having multiplied cases. However, even in their abridgment, they have appeared to me to offer the more interest, as the first three furnish us an example of simple demonomania, and the two latter, that of this malady complicated with dementia; the one attended with fury, the other with paralysis. Besides, the whole five present features which characterize demoniacal possession. I pass to the analysis and appreciation of the symptoms of this malady, compared with the signs of possession, pointed out by writers on demonology. Demonomania is sometimes epidemic. Like all nervous maladies, it propagates itself by a kind of moral contagion, and by the power of imitation. The *mal des andous*, which afflicted Holland, Belgium and Germany, in the fourteenth century, was a kind of demonomania. In 1552 or 54, there was at Rome an epidemic of the possessed, which affected eighty-four persons. A franciscan monk exorcised them in vain. The devils accused the Jews. The major part of those possessed were Jewish women who had been baptized. About the same period, in the monastery of Kerndrop in Germany, all the nuns were possessed. The devils designated the cook of the convent, who confessed that she was a sorceress, and was burnt, together with her mother. The neighboring villages were also infected. The example of the possessed at Loudun, indicated most clearly, the power of the imagination and imitation. This epidemic having pervaded certain neighboring cities, threatened the Cevennes and all Upper Languedoc; when the prudent policy of a bishop checked the progress of the evil, by divesting it of whatever pertained to the marvelous, with which the imagination had furnished it. The convulsionists of St. Medard, deservedly figure among the victims of moral contagion. This happily, is the last scene of the kind that has afflicted our country.

We have elsewhere seen, that delirium ordinarily takes the character of the ideas prevailing at the epoch when the insanity bursts forth. So demonomania is most frequent when religious ideas occupy the mind, and are the subject of all discussions, whether public or private, civil or political. The history of Christianity, the irruption of the religion of Mahomet, and the establishment of Lutheranism and Calvinism prove this. In our day, the delirium of many insane persons runs upon politics. Mental alienation is strikingly hereditary. Why should not demonomania be so also? Should we be surprised, if writers on demonology tell us, that from generation to generation, the members of the same family were devoted to the devil, or were sorcerers?

Very rarely were they accustomed to see cases of demoniacal possession, previous to the age of puberty. Although a father and mother might have devoted their children to the devil, before or soon after their birth, they were initiated or admitted to the assembly of witches only after the age of puberty. Before this period of life, there was neither mania nor melancholy. The age most favorable for possession is from forty to fifty years. Old persons are little exposed to it. Thus, all authors observe that old men are no better adapted to utter oracles than for sorcery. An enfeebled imagination no longer lends itself to these miserable illusions. The appellation of *old sorceress*, confirms this result of general observation. One of the influences of this *old sorceress* is shown by a dry, emaciated, wrinkled and decrepit exterior, in the case of demonomaniacs who, in consequence of the moral tortures which they experience, and the physical evils and privations they endure, grow old, long before the usual decay of nature. Women are more subject to this disease than men. Pliny assures us, that women are to be preferred to men, in magic. Quintilian is of the same opinion. Saul goes to consult witches.

Those are witches whom the Jewish records recommend us to guard against. They were priestesses, pythonissæ and sybils, who uttered oracles. Bodin maintains that at the most, we find but one sorcerer to fifty sorceresses. Paul Zacchias establishes a still greater difference. Woman is more decidedly nervous; she is more dependent upon her imagination, more submissive to the effects of fear and fright, more accessible to religious notions, more given to the marvelous, more subject to melancholy than man. Having reached the critical period, forsaken by the world, and passing from ennui to sadness, woman sinks into lypemania, often into its religious form. If hysteria be blended with it, the conflict of the senses with the religious principles, plunges her into demonomania, when mental weakness, ignorance and prejudices have, so to speak, fashioned the mind in advance, for a similar disease.

The melancholic temperament, as that most favorable for the production of lypemania, is that of the greater part of demonomaniacs. A nervous habit, an imagination easily excited, and a pusillanimous disposition, essentially predispose to this disease. It would be difficult to point out the conditions of life most favorable to the development of lypemania. It embraces among its victims, sovereigns, legislators, philosophers, the learned; but more particularly the ignorant; men, whose infancy has been spent in listening to the histories of wizards, demons, ghosts, and all those influences that are calculated to keep the mind restless, tormented, and disposed to the strangest impressions of alarm and fear. (Mallebranche). A bad education, religious fanaticism, an ascetic life, false and exaggerated notions of divine justice, damnation and hell, are also causes, more or less remote, of this disease; just as the perusal of romances disposes to erotic melancholy, and the reading of mystical books, or those relating to sorcery, to demonomania. For a long period, demonomania has been scarcely observed, and attacks only the feeble-minded and credulous. Since the reign of Henry III, Œrodius remarks that sorcery has been the portion only of the ignorant and peasantry. Among more than twenty thousand insane persons who have passed under my observation, I have scarcely seen one among a thousand, stricken with this fatal disease. They are, almost invariably, persons belonging to the lowest class of society; rarely men occupying rank in the world by their birth, education and fortune. There are besides, certain worthless knaves, who abuse the simplicity and ignorance of the inhabitants of the country, by causing them to believe that they possess a diabolical power; that they can destroy the virile power; make children sick; and throw a spell over the flocks. Certain phenomena imperfectly observed, fortify the belief of these timid, simple and credulous people, and sorcery still maintains certain obscure and contemptible relics of its ancient power. We still find in Germany, certain traces of this leprosy of the human mind, which, with this exception, is banished into the extreme north of Europe; and into the country of the Malaquais, Siamese, Indians, and other people enveloped in the thick darkness of ignorance.

The individual and proximate causes of demonomania, are the same with those of lypemania; but this variety recognizes causes which may be regarded as specific. They are either physical or moral. A feeble mind, a vicious education, the reading of works on sorcery, magic, etc.; false religious notions and prejudices, predispose to demonomania. An intense moral commotion, a fright, an unusual or threatening proposal or look, an exciting sermon, the force of imitation, suffice to produce an attack. Widowhood, the critical period, frictions upon the body, suppositories prepared from certain substances, drinks composed of enervating and narcotic substances; such are the physical causes of this malady. Gassendi tells us, that a provincial shepherd was accustomed to provide himself with a suppository of *Stramonium* when he retired at night, and on waking would relate all that he had seen at the witch-meeting. Certain sorcerers in order to gain access to these assemblages, were

accustomed to anoint their bodies with fat, which had been prepared with irritating, or narcotic substances. These applications produce their effects in two ways: 1st, upon the imagination; by exciting and fixing it upon events, promised and desired; 2d, by irritating the brain, they provoked dreams, which were almost always predicated upon the ideas, desires or fears of the sleeper. This mode of enchantment is very ancient, since the Greeks denominated sorcerers and magicians φαρμακίδες. They also gave them this name perhaps because the use of plants was connected with their enchantments.

Demoniacal possession has often been caused by the look merely, of a sorcerer. . The influence of an amorous look upon a young person, the effects of a choleric or threatening expression upon a timid or prejudiced mind; will they not account for the consequences of enchantment by the *look!* without the necessity of having recourse to a supernatural and diabolical power? The attack of demonomania bursts forth, in general, suddenly. Its invasion is prompt, its duration variable, and its cure doubtful. Demonomania terminates in dementia. Convulsions, marasmus, scurvy, phthisis or a slow fever, bring to a close the life of this unfortunate class of our fellow beings. Demonomaniacs are emaciated, their complexion is sallow and sun-burnt, their physiognomy indicates disquietude, the look is suspicious, and the features of the face shrunken. They do not sleep, eat little, and often secretly. They walk much, and suffer from constipation. They are fond of solitude, experience pains in the head, chest, abdomen and limbs, and accuse the devil of it. They feel an internal fire which consumes them, and believe that they are in the flames of hell which they alone perceived. Their breath seems to be on fire. With groans they lament their fate, but never weep. They strive to injure those who surround them, and suffer from a thousand hallucinations, and even fury. The possessed exhale a very strong odor, which betrays, say they, the presence of the devil. This phenomenon is not rare in nervous maladies, either because the breath has become fetid, or because the transpiration has acquired an odor very much increased by the morbid character of the fluids. Does the fetor of the breath announce a threatening attack of convulsions, mania or hysteria? Women in a state of demonomania, experience a thousand hysterical symptoms. They believe that they are transported to the midnight assemblies of wizards, where they are witnesses of the strangest extravagances. They have intimate communications with the devil or his subordinates; after which, a collapse bringing an end to the attack, they find themselves again in the same place, from whence they believed they had been taken. Who does not see in this, the last stage of an attack of hysteria? Amidst the obscenities of these meetings, which we shall be cautious about describing,—who does not recognize the turpitude of an imagination, polluted by the vilest, most obscene and disgusting debauchery? who does not recognize a description of the most extravagant, shameful and ribald dreams? The frequent ecstasies which take place in nervous affections, partake of a sublime and contemplative character, if, during its waking hours, the soul is elevated to the contemplation of noble and divine objects. They are erotic, if the mind and heart lull themselves in reveries of love. They are obscene, if, when awake, one indulges in lascivious thoughts, and if the uterus, irritated and excited, gives place to illusions, which are regarded as diabolical practices.

The cases reported in the different articles of this work, establish the correctness of this view. Besides, they strikingly resemble the case of Angèle de Soligny, reported by Martin Del-Rio. Did not this female present all the features of nymphomania, provoked by widowhood, and a contemplative life carried to an extreme, and combated by religious principles? In the description of the nightly meetings of the witches, are united all those circumstances which are proper to excite the imagination. Assemblies, devoted to mysterious rites, have at all times been holden during the night. Night is most fa-

vorable to illusions and to fear. It presides over dreams. An uninhabited island, a rugged rock, a cavern surrounded by an ancient forest, an old and abandoned château, a cemetery, etc., such were the places of rendezvous. The adoration of the he-goat, dates back to the earliest period. It appertains to an ancient religious custom of the Egyptians, who offered, in Mendes, an infamous worship to the he-goat Hazazel. The ancients were in the habit of joining to prayers and invocations, the preparation of certain plants, and the immolation of certain animals, devoted to the infernal powers. Children also, were sacrificed. From the time of the introduction of christianity, sorcery allied itself to those notions of spirituality that prevailed. It borrowed from the christian worship, crosses, prayers and consecrated wafers; and profaned these sacred objects in a manner most revolting, in order to avenge the devil for his defeat. The sorcerers of Ireland, always recite the *Ave Maria* in their practices of sorcery. In Livonia, the grand talisman against sorcery consists in the following words; *Two eyes have regarded thee; three others can cast upon thee a favorable look, in the name of the Father, Son and Holy Ghost.*

Like all lypemaniacs, demonomaniacs suffer from hallucinations and illusions of the senses. Some think that they are the devil, others persuade themselves that they have the devil within them, who pinches, bites, rends and burns them. Some hear him speak, and his voice proceeds from the stomach, bowels or uterus. They converse with him, the devil recommending to them the commission of crimes, murders, acts of incendiarism and suicide. He provokes them to the most disgusting obscenities, and to blasphemies the most impious. He threatens and even *strikes* them, if they do not obey his orders. Many, who were retained in prison on account of their possession, assured those about them, that the devil had come thither to find them. Do we not see maniacs and melancholics, who converse with imaginary beings, who, they persuade themselves, are at their side, and were introduced by the chimney and window? The illusions of sight and touch, are here the same as with demonomaniacs. Some of the possessed or sorcerers, as a conveyance to their nightly assemblages, bestrode a broom. Others were mounted upon a he-goat, an ass, dog, etc. The latter, anointed the body with an ointment. The former had need only of their imagination. All, without passing up the chimney, leaving their habitation, or even getting out of bed, reached the place of meeting, where they saw the devil; now, in the shape of a he-goat, a satyr or black cat; now, in that of a man, either black or white. Such are the disgusting reveries that have given rise to the belief in the existence of incubi and succubi. Some women, mostly hysterical, have seen the devil under the form of a young man, handsome, and well made. Doubtless libertines, abusing the weakness of some women, have borrowed from the devil his form and power. I once had in charge a maniac, who every night believed that he went to bed with his mistresses, and was accustomed to converse with them, assuming a different tone with each, and having reference to their respective dispositions and humor. There are many erotic lypemaniacs, who are convinced that they have had intimate relations with men, to whom they have scarcely addressed a word, but by whom their imagination has been taken.

Mad'lle de S., aged thirty-one years, of medium size, having black hair and eyebrows, a slender habit of body, and nervous temperament, together with a disposition disposed to melancholy, in company with her mother attends the botanical course of a celebrated professor. After a few lectures she persuades herself that she is pregnant by the professor, who is advanced in life, and to whom she has never spoken. Nothing dissuades her from this belief. She becomes much emaciated, loses her appetite, and is invincibly opposed to listening again to him who has made her a mother. The menses are suppressed, which is a new proof of pregnancy. The counsels of a tender and beloved mother, physicians and medicines, are all repulsed with obstinacy. She spends

the eighth month in preparing child-bed linen. The ninth and tenth month pass without confinement. It does not take place, says the patient, because there are not colics and necessary pains. She stands much with naked feet, in order to provoke pains. She hears the father of her child, who exhorts her to patience, and encourages her to support the throes favorable to parturition. She sometimes utters cries, which are common to women at this period. In other respects, she is perfectly rational. I know well that I am like an insane person, she sometimes says, but it is certain that I am pregnant. She is committed to my care after suffering from this malady for eighteen months. She is very much emaciated and feeble, pulse frequent and small, skin dry and hot. She is sad, neither speaking nor moving; wishing neither to sit down during the day, nor to retire during the night. She also refuses all nourishment. I was enabled to overcome her unwillingness to take food, by effusions of cold water. But nothing triumphed over the convictions of this patient, who, some months after, went into the country to terminate her earthly pilgrimage.

The continual muttering of some of the possessed, has given rise to the belief that these unfortunate beings conversed with the devil in an unintelligible manner. We find this symptom existing in a great many melancholics, especially among those who have fallen into a state of dementia, and who stammer, in a low voice, words having no connection. The possessed, like all melancholics, beset by their own ideas, neglected their relatives, friends and interests. They were miserable and unfortunate; never improving, in a pecuniary respect, the condition of their family. They could no more do it, than deliver themselves from the demons and judges who were going to burn them. Improvidence, and incapacity for every kind of occupation, are the characteristics, not only of lypemania, but also of most of those passions which are intimately connected with it. The possessed were very obstinate in their belief, rarely betraying their adherence to it. Notwithstanding the severest punishments, in spite of the rack, which was most inhuman, the greater part remained attached to their notions, and obstinately refused to renounce their compact. The demon gave them this power and obstinacy. They were abandoned of God, who detested their abominations. This infatuation is characteristic of melancholy. Neither reasoning, privations, nor pain, can convince the lypemaniac. The stronger the efforts made to persuade him, the greater is his resistance, and the more powerfully does he withstand. Suspicion, fear and self-love fortify his convictions, which punishments only increase. I had in charge a young man who, deceived by an exaggerated notion of honor, refused all nourishment. After having exhausted all known means to overcome this resolution, I applied with much preparation, red hot irons upon different parts of his body, without overcoming his purpose. A surprise succeeds better. What can man not support, when sustained by a strongly excited imagination! The children of Sparta, lacerated by whips upon the altar of Diana, expired without uttering a complaint. A child at Lacedemon, having stolen a fox, concealed him beneath his tunic, and permitted his abdomen to be mangled by the teeth and claws of this animal, without manifesting the least pain, through fear of being discovered. To how great an extent does insensibility proceed in hysteria and convulsions!

The princess B., twenty seven-years of age, of a nervous temperament, a very lively imagination, a gay and mild disposition, had received a very excellent and liberal education, too strictly intellectual for a woman. Married when very young, she meets with great domestic trials, which repress her natural gayety, and render her melancholic. Missionaries go to St. Petersburg, and obtain permission to preach. Their sermons produce a strong impression upon the minds of the great ladies of that country. The imagination of the princess is not the last to become excited. See her now, an enthusiast, and uncertain whether she shall abandon the prevailing mode of worship. The

sovereign, at first, expresses his dissatisfaction, and afterwards sends back the missionaries. Every one fears to incur the displeasure of a sovereign whom he loves. The princess, enfeebled by her sorrow, is easily subjugated by religious terrors, and the apprehension of a persecution. She becomes a lypemaniac, accuses herself of having committed crimes, and expresses a dread of being exposed to suffer martyrdom. Her aberration of mind increases, and one day, either to punish herself, or to test her courage, she places the middle finger of the right hand in the flame of a wax candle, and allows it to remain there so long, that it was necessary to remove its three phalanges, so deep had been the burn. At the expiration of four years, alternating between agitation and fury, composure and sadness, excitement and depression, the princess is brought to Paris and committed to my care. She was in a state of dementia complicated with paralysis, and attended with a disposition to transports of passion, and to strike when opposed. What could I do to overcome a disease like this? Her physical condition is improved, but reason was forever lost.

Punishments, invented by the most refined cruelty, could not draw tears from the eyes of the possessed when put to the torture. The demon, said they, dried up their source. Almost all lypemaniacs experience a desire to weep, without the ability to shed a tear, by whatever effort they may make. The sleep, into which some fell during the tortures of the rack, was the strongest proof of possession. They did not then know, that excessive pain produces an uncontrollable desire to sleep. They were accustomed to bind the limbs of the possessed before casting them into the water; and if they then swam upon it, they were regarded as possessed. Some hysterical women could not submerge themselves in the water, and floated when plunged into it. Those in favor of the punishment of the possessed, recommended that these unfortunates be interrogated, immediately after their arrest; because, so soon as they are taken, they think that they are forsaken by the devil, and confess every thing; whilst, if we allow them time to reflect, the devil comes and gives them instruction, (Del-Rio, Bodin, de l'Ancre). Who can forget the effects of a lively and vigorous impression, which always suspends the delirium for some moments, only to resume its power, so soon as the first effect of this moral commotion has ceased? Upon this phenomenon, reposes the most important therapeutic precept, for the treatment of the insane. Some of the possessed, unable to support the miseries they experienced, and incapable of resisting the varied solicitations which the devil made to them, pursued by remorse for crimes which they had committed, or with which they charged themselves, tormented by their thoughts, and tortured in a thousand ways, solicited death, prayed that the time of punishment might be hastened, threatened to destroy themselves, and marched gayly to the scaffold. Is not this symptom common to many melancholics, who prefer death a thousand times, to the disquietudes and anguish that torment, and the moral suffering which overwhelms them; an agony more intolerable than all the physical pains imaginable? Others on the contrary, persuaded that they could not die, (the devil having given them an assurance of it), went to their punishment with composure and tranquillity; sometimes with disdain. This sense of security, which depended upon an illusion, a deceitful hope, was regarded as an incontestable proof of the presence of a demon. I have reported the cases of lypemaniacs, who were fully convinced that they could not die, and who were accustomed to enquire of me, what they should do, when left alone upon the earth. Convulsions existed in all times, because they depended upon the state of the organism, as well as the imagination. They complicate all the forms of mental alienation. Priestesses, sybils and pythonissæ fell into convulsions when the prophetic spirit took possession of them. The possessed were seized with convulsions when the delirium was very intense, and some became maniacs, *enraged*, and died. This termination, which is not rare in

convulsive diseases, was regarded as the last effort of the devil, constrained to leave the body of the possessed person; and knaves took advantage of it, the better to deceive the ignorant. In reading the histories, reported by writers on demonology, as preserved in the accounts of the trials of the possessed, we learn that those contortions, convulsions, and great muscular contractions, referred to as efforts of the devil, are nothing more than those nervous symptoms, to which hysterical persons, hypochondriacs and epileptics, are all exposed. These convulsions did not deceive Pigrai when appointed to pronounce upon fourteen unfortunate persons, who had been condemned to the flames. He decided that hellebore should be given them. They did not triumph over the learned men who saw them at St. Medard, nor over the magistrate who caused them to cease at his will; notwithstanding the murmur of certain rogues, who desired longer to abuse the public credulity.

From what precedes, we conclude:

1. That demonomania is a variety of religious melancholy.

2. That it recognizes as its remote cause, ignorance, prejudices and the feebleness and pusillanimity of the human mind.

3. That disquietude, fear and dread provoke it.

4. That the delirium, determinations and actions of demonomaniacs, depend upon, as their principal cause, false notions of religion, and a frightful depravation of morals.

5. That this disease has become more rare, since religious knowledge, a better education, and more general instruction, have more uniformly enlightened all classes of society.

We must signalize as one of the varieties of demonomania, that state in which some insane persons, stricken by the terrors of hell, believe that they are damned. These are persons whose minds are feeble, timid and fearful; whose hearts are upright and pure; whose convictions are profound, and who think that they have committed errors and crimes whose chastisement they cannot shun. Such are in a state of despair. They are not, like demonomaniacs, actually in the power of the devil. They neither see nor feel the sulphureous flames which devour them. Still they dread damnation, and are convinced that their career will terminate in hell. They impose upon themselves mortifications more or less extreme, as well as singular, in order to avoid their destiny. The history of all religions presents the cases of men who, fearful of the future, submit both their bodies and minds to the most cruel and inconceivable tortures; now, to secure the favors of heaven; and now, to disarm the celestial anger. A pusillanimous disposition, exaggeration, ignorance of the true principles of religion; the reading of books calculated to enslave the mind, the critical period, masturbation, and reverses of fortune; are the most frequent causes of this variety, which, in our day, is not so rare as demonomania, and does not spare, like it, the higher ranks of society. Demonomania furnishes the most striking proof of the strange opposition which exists between the ideas and determinations. The impulse to murder and suicide is very much to be feared among individuals, who stand in fear of eternal damnation. Sauvages, Forestus and Pinel, mention several cases of them. It is neither the spleen, nor disgust of life, which urges them on to suicide. It is neither the fright, which, depriving man of the faculty of reasoning, precipitates him upon the evil which he most fears. How happens it, said I to a young man, that you fear being damned, and yet wish, by taking your own life, to hasten on the period of eternal punishment, the very thought of which fills you with despair? This simple mode of reasoning he could not comprehend. Fear is a sentiment which is surmounted by a still stronger one. Persons who fear eternal damnation, are indescribably miserable. Solely occupied by their sufferings and actual torments, imagination represents this state of anguish as the greatest of evils; as greater than death

itself. The evils which they dread, but do not feel, necessarily produce less effect upon them, than those which they endure. Future ills can be but imaginary, whilst actual ones are realities. Their intolerable position is frightful, and must be changed. Not having the courage to suffer, how should they have to hope? All is despair. This state of things must cease, cost what it may. The surest means of effecting it, is to cease to live. The resolution is taken,—reason wanders,—the future—and the punishments of hell, vanish. Delirium and despair direct the steel of the monomaniac, who commits self-murder.

Of all insane persons lypemaniacs are the most cruel. Not only do these wretched beings attempt their own destruction; but direct their deadly blows at the persons of their friends, relatives and children. A miserable being, after listening to a sermon, believing himself damned, goes home and destroys his children to preserve them from the same dreadful doom (Pinel). A young woman experiences certain domestic trials. She immediately persuades herself that she is lost, and for more than six months is haunted with the desire to destroy her children, to preserve them from the sufferings of a future state. When suffering from this frightful form of insanity, and, yielding to their blind fury, these wretched beings have executed their horrible purposes, they are never restored. Such is my experience. We are of the opinion that returning reason, bringing with it but too just reproaches, induces moral suffering, and gives rise to the most poignant regrets, which are shortly succeeded by the same torments and delirium. The treatment of demonomania is the same with that of lypemania, or melancholy with delirium. The pharmaceutic treatment, as well as the regimen, depend upon the knowledge of its causes. Albrecht tells us, that he cured a robust man, who for some years was regarded as possessed, by causing him to take wine, impregnated with emetic qualities, during alternate periods of fourteen days; at the fourth period his patient was cured.*

The moral means do not differ from those which are adapted to lypemania in general. The assistance of ministers of religion has rarely been followed with permanent success. A lady believed herself damned, and had recourse to several priests. A prelate, as respectable by his age as his virtues, went to her residence arrayed in his pontifical robes, received her confession, and lavished upon her religious consolations. The patient recovered her reason perfectly for a few hours; but on the following day, she relapsed into a state worse than her former one had been. However, I by no means think that such aid ought to be neglected. The consolations of religion, the presence and encouragements of a minister of the altar, by calling into exercise a degree of confidence on the part of the patient, may cause hope to spring up in his breast, and prove the commencement of a cure. We find several examples of cures among authors. Zacutus relates, that he restored to health a demonomaniac, by introducing into his chamber during the night, an individual in the guise of an angel, who announced to the patient that God had pardoned him. We can imagine, that success might attend the like efforts in similar cases. If the disease is not of long standing, if it is not complicated with organic lesions, with paralysis or scurvy, we may hope for a degree of success. Reil suggests a great number of means, but reduces all to this general principle: to make a vivid impression upon the imagination of the insane, in order to subjugate it, and afterwards to gain possession of their confidence and mind; or to combat a passion by a passion. To do this, an observing mind is necessary, and a thorough acquaintance with the management of the understanding and passions of men.

Connected with demonomania as a sub-variety, is Zoanthropy; a deplorable aberration of the mind, which perverts the instinct even, and persuades the

* Philosopical Decade, year iv.

lypemaniac that he is changed into a brute. This strange form of insanity has been observed from the highest antiquity; and was connected with the worship of the ancient pagans who sacrificed animals to their gods. Lycanthropy was described by Ætius and the Arabians. It has been known since the fifteenth century, and they have given in France, to those afflicted with this disease, the appellation of wolf-men. These wretched beings fly from their fellow men, live in the woods, church-yards and ancient ruins, and wander, howling, about the country at night. They permit their beard and nails to grow, and thus become confirmed in their deplorable conviction, by seeing themselves covered with long hair, and armed with claws. Impelled by necessity or a cruel ferocity, they fall upon children, tear, slay and devour them. Roulet, at the end of the sixteenth century, was arrested as a wolf-man, and confessed, that with his brother and cousin, after having rubbed the body with an ointment, they were changed into wolves, and that they then ran about the fields, and devoured children. Justice, more enlightened than in the preceding ages of the world, sent these unfortunate men to a hospital for the insane.

There have been lycanthropes who believed that they were transformed into dogs. These are called cynanthropes. A distinguished lord of the court of Louis XIV. experienced, at times, a disposition to bark, and was accustomed to put his head out of the window to satisfy this desire. Don Calmet tells us that in a convent of Germany, the nuns believed that they were changed into cats, and that, at a certain hour of the day, they were accustomed to run all about the convent, striving to outdo each other in mewing. We find, even in our days, insane persons who, no longer believing in the power of the devil over matter, still believe *in destiny;* and persuade themselves that it imposes upon them all the pains they suffer; that they are objects of horror, and ought to be removed from the world. This unfortunate caprice manifests itself in the country. We have at Charenton a young man from the mountains of Limousin, of a bilious-sanguine temperament, slender and emaciated in his habit, with black hair and eyes, and a pale complexion, who has a *dracq* in his abdomen. The dracq, or destiny, sometimes enters his head, tortures him in a thousand ways during the day, and particularly in the night, addresses and threatens him. If I ask this unfortunate young man what this dracq may be, "I know nothing about it," he replies, "but it is a destiny that has been imposed upon me, and every thing has been done to deliver me from it, but without success." Other lypemaniacs are convinced that they have no head, that they have one of glass or of a bird, that an enormous excrescence depends from the nose, and that their body is of butter, their limbs of wax or of glass. We must also speak again of that singular perversion, which persuades a young woman at Charenton that she no longer has a body, and who is constantly going about, like a person who has lost his way, seeking for her body. She calls upon us for it, during a visit, and repeats incessantly, "I have no longer a body,—what will become of me! give me my body." Hippocrates understood the cause of the disease of the Scythians, which sometimes appears in our days, from different influences.

Mad'e M., a widow, experienced, after the death of her husband, very great trials, together with the loss of her fortune. She has an attack of mania, makes attempts to commit suicide, and is sent to the Salpêtrière. She was small in stature, very much emaciated, much agitated, constantly talking, assuring us and repeating with transports of emotion, that she was not a woman, but a man. If any one, in speaking to her, addresses her with the appellation of Madame, she immediately becomes more agitated, utters abusive language, or gives herself up to acts of violence. M. Pussin, then inspector in the direction of that department of the hospital devoted to insane women, engaged with M. Pinel to procure the dress of a man for this female. She attired

herself in it with transports of joy, and walked about among her companions with a sort of ostentation. She was more composed and tranquil, and talked much less, but was excited to fury, if not addressed by the title of Monsieur instead of Madame. Her strength gradually gave way, and she entered the infirmary in the month of November, 1802, having a copious diarrhœa, and being exceedingly weak. She rejected baths, ptisans, and the potions that were prescribed for her. At length, she became unwilling to take any thing, and died, aged sixty-eight years, her delirium remaining unchanged to the last days of her life.

At the post-mortem examination, I found the external vessels of the cranium gorged with blood. The cerebral substance presented nothing remarkable, except numerous bloody points when it was divided by slices. The lateral ventricles contained each about two ounces of serum. The mucous membrane of the stomach, in its small curvature, presented an ulcer of about four inches in circumference, its surface being covered with granulations, and of a grayish aspect. Near the pylorus, there was a species of polypus, extremely soft, and large at its base, projecting about an inch, and having a brown color. Traces of inflammation were noticed upon the mucous membrane of the stomach, cecum, colon and rectum; and at some points this membrane was destroyed. The gall bladder contained bile of a deep green color, inspissated, and mingled with small concretions.

I had in charge, many years since, a man twenty-six years of age, of a noble stature, large size, and genteel figure, who, in his earliest youth, was very fond of dressing himself in women's clothes. Admitted into the highest circles, if a comedy was performed, he always chose the part of a female. At length, in consequence of a trifling opposition, he persuaded himself that he was a woman, and sought to convince every body of it, even the members of his family. Several times did he, while at home, divest himself of all his clothes, array himself with the head-dress and costume of a nymph, and, thus attired, wished to walk abroad in the streets. When committed to my care, aside from this notion, he was not irrational. He was however, constantly occupied in curling his hair, in admiring himself in the glass, and with his dressing gowns, used every effort to render his costume as similar as possible to that of a woman. He was accustomed, also, to imitate their step when walking. One day while walking with him in the garden, I raised the lappet of his riding coat, which he had carefully arranged, when immediately he takes one step backward, and treats me in an impertinent and lewd manner. No reasoning, attention nor regimen, were successful in restoring this unfortunate man to the use of his reason.

SUICIDE.

Origin of term.—Ancient philosophers not agreed with respect to the appreciation of this act.—Legislation with respect to it.—A variety of circumstances lead man to terminate his existence.—The impulse of lofty sentiments,—false popular views,—national usages,—passions,—febrile delirium and mania,—hypochondria and lypemania.—SUICIDE PROVOKED BY THE PASSIONS.—When strongly excited, always produce disturbance in the organism or understanding of man.—Acute and chronic.—Examples of acute suicide, with remarks.—Chronic suicide.—Remarkable examples.—SUICIDE PRECEDED BY HOMICIDE.—Mental condition previous to, and after an act of homicide described.—Form which precedes homicide, usually acute, sometimes chronic.—Examples, and development of important principles.—Reciprocal suicide.—Examples.—Disposition sometimes feigned.—Examples and treatment.—CLIMATES, SEASONS, AGE AND SEX, CONSIDERED AS CAUSES OF SUICIDE.—Climates one of the proximate causes, but less active than morals, civilization, etc.—Table of quarterly admissions at the Salpêtrière of those who had attempted suicide.—Most frequent during the warm seasons.—Hereditary.—Examples.—Most frequent when.—See table.—Children sometimes victims of suicide, from vicious education.—Old age rarely exposed to suicide.—Examples.—Less frequent among women than men.—Data establishing proportion of suicides between men and women.—Exceptions.—Sometimes epidemic.—Cause.—Preventive.—The reading of immoral and licentious books tends to suicide.—Description of chronic suicide only given.—Attempts usually voluntary.—Often great insensibility.—Examples.—Instruments which suicides employ.—Great precaution used by some, to render their attempts effective.—Several cases with treatment.—Vanity, and a spirit of revenge sometimes manifested in this act.—Illustrations.—Various considerations prevent those who desire death, from the commission of suicide.—Case illustrative.—A frightful perseverance manifested in some cases.—Suicide is acute or chronic; contiuned or intermittent.—Examples.—PATHOLOGICAL LESIONS OBSERVED AMONG SUICIDES.—Opinions of Gall, Home, Recamier, Loder and others.—Post-mortem examinations.—Note from M. Leuret.—Query respecting the influence of the organs of digestion in the production of suicide.—TREATMENT OF SUICIDE: MEANS OF PREVENTING IT.—Moral influences, with examples.—A specific treatment recommended by some.—Bleeding.—Tonic.—Bark in combination with a narcotic or sedative agent.—Cold bath.—Copious draughts of cold water and an issue over the liver.—Abundant corporeal and pleasant mental exercises.—(*Farther remarks on treatment.*)—Constant watchfulness on the part of those who have the charge of persons suffering from a suicidal propensity, indispensable.—Restraining apparatus not to be relied upon.—Should sleep in public halls under the constant watch of an attendant.—(*Remarks on.*)—Success of this measure at the Salpêtrière.—Mode of dissipating a repugnance to food in the early

stages of insanity.—Fear sometimes employed as a restraining agent.—Is suicide a criminal act? Can it be prevented or lessened by legislation? Remarks, etc., on the writings of Doct. Burrows.—Suicides greatly increased within the last half century.—Relative proportion of suicides in Paris and Berlin compared.—Proportion of men and women.—Proportion of either sex who have availed themselves of certain modes of committing suicide.—Researches of M. Guerry on suicide.—Summer produces more suicides than autumn.—Greatest number committed between the hours of four and six, and least, between two and four, in the morning.

In no language, was there formerly a term to express that act, by which man terminates his existence. The term which was wanting to express an act which has unhappily become so frequent, was originated, during the last century, by the celebrated Desfontaines. It is *suicidum*, *autochiria*, *melancolia anglica* of Sauvages, *suicide* of Pinel. Morals and religious beliefs, as well as the laws, have singularly contributed to modify the opinion of people respecting self-murder, and to render it more or less frequent. The ancient philosophers were not agreed with respect to the appreciation of this act. Some, with Demetrius and Zeno at their head, have not only approved of suicide, but justified it by their example. Certain others, as Plato and Cicero, have entertained doubtful opinions, while the greater number, with Pythagoras and Socrates, condemn it. Legislation also, has varied among different people, and even in the same country. There, suicide is authorized by law: here, it is tolerated only under certain determinate circumstances: elsewhere, it is condemned as a crime. All the laws of modern and civilized Europe, and even the Coran, condemn and brand with infamy, the act of self-murder. However, a general opinion, which regards suicide, either as a matter of indifference, or as the effect of disease or delirium, seems to have prevailed in our days, though contrary to the civil and religious codes. It does not belong to my subject to treat of suicide in its legal relations, nor, consequently, of its criminality. I must limit myself to showing it to be one of the most important subjects of clinical medicine. Self-murder takes place under circumstances so opposite, and is determined by motives so diverse, that it cannot be limited to any single denomination. However varied may be the motives and circumstances, which cause men to expose their lives, and to brave death, they almost always exalt the imagination, either on account of a good, more precious than life, or an evil more formidable than death.

Before tracing the history of suicide, it may be well perhaps, to point out the principal circumstances which lead man to terminate his own existence. From these preliminary considerations, we will pass to an exposition of the symptoms, to an enquiry into the causes, and to the post-mortem examination of bodies. We will finally close, with some general views respecting the means proper to prevent suicide, and to combat the fatal impulse which urges man to the commission of self-murder. Man destroys himself, or exposes his life to certain destruction, under the impulse of the loftiest sentiments. The act is then worthy of admiration, and excludes all blame. The victims of false, but popular views; of barbarous, but national usages; not only are individuals, but whole sects, doomed to a voluntary death. All the passions have their seasons of fury. In their excesses, there is nothing that they do not sacrifice; and man, while a prey to a passion, spares not his own life. In febrile delirium and mania, more lives are taken than is usually supposed. Hypochondria and lypemania are most frequently the true cause of that abhorrence and utter weariness of life, which so often give birth to that form of suicide, which we call voluntary. He who wishes to terminate his existence, moved by diverse motives, does not always lay violent hands upon himself, but becomes a homicide. It is not unusual for two individuals, led away, either by

blind passion, or by wretchedness, to resolve to die, and reciprocally to take each other's life.

Finally, suicide is sometimes feigned. From what precedes, we already perceive, that suicide is, with respect to our knowledge, only a phenomenon, consecutive to a great number of diverse causes; that it presents itself under very different characters; and that this phenomenon is not exclusively confined to any one malady. It is in consequence of having made suicide a malady *sui generis*, that they have established general propositions, which experience disproves. He is not the homicide of himself, who, listening to the dictates of noble and generous sentiments, places himself in certain peril, exposes himself to inevitable death, and makes a voluntary sacrifice of life in obedience to the laws, and to guard the faith, plighted for the salvation of his country. Such were the Decii, who sought death in the camp of the enemy, to fulfil an oracle, which, at this price, had furnished victory to the Athenians. Such also, was Curtius, who precipitated himself armed, into an abyss, to assure victory to the Romans. Assas was another, who hesitated not to sacrifice his life to save the regiment of Auvergne, which would have been surprised, had it not been for the heroic devotion of this officer. The generous inhabitants of Calais and Rouen, were of this number; who made an offering of their lives, to save their fellow citizens who were ready to perish by the sword of the enemy, or by famine. Were Socrates and Regulus self-murderers; the one, for having refused to avoid the execution of the laws which condemned him to death; the other, for being unwilling to forfeit his word? Shall we denominate suicides, those wretched beings who, victims to religious beliefs, and the usages of their country, think, that by devoting themselves to death, they perform a duty, and an act at once memorable, and worthy of recompense? This hope, embraced with ardor, has resulted in the sacrifice of life, not only on the part of a few individuals, but of colonies, and entire nations. Such were the Thracians, Germans and Arabians; and such, at this day, are the Indians.

The Gymnosophists, living in forests, learned to despise life. Meditating constantly upon death, they came to regard it as the supreme good. Diseases, infirmities, and old age, were regarded among them as an opprobrium, and the deepest disgrace was attached to a natural death. Thus, so soon as they were sick, old or infirm, they threw themselves upon the funeral pile. In the capital of the island of Ceos, the country of Simonides, old people were never seen. The usage of society called for their sacrifice, and the laws permitted those who had arrived at the age of sixty years, and were no longer capable of serving the republic, to commit the act of self-murder. It was a disgrace, to live for one's-self only. He who was to die, assembled his relatives, and after being crowned with flowers, as on a feast day, took a cup of the decoction of the poppy, or of hemlock. The ancient inhabitants of the Canary islands, in order to honor their gods, were accustomed to throw themselves into an abyss, hoping to enjoy the felicity which was promised to a death so imposing. The Japanese drown themselves, the better to celebrate the divinity Amidas; or shut themselves up in a tomb, walled on all sides, leaving only a small opening for the passage of air. Buried while living, they call without ceasing, *Amidas*, *Amidas*, until they die from hunger and exhaustion. The Gauls were accustomed to betake themselves to the other world, in order to close up their affairs. They lent money, on condition that it should be repaid in the other world. They were accustomed to throw themselves upon the funeral pile of their relatives and friends, to indicate their extreme reluctance at parting with them. The widow of Malabar, mounts the funeral pile which is to consume the remains of her husband, in obedience to an ancient custom; unwilling to survive, to meet the disgrace which she encounters, in

not sacrificing herself to his manes. The feast of the *Ticonal* never takes place in Bengal, without being the occasion of numerous deaths.

It is difficult, says Dr. Deville, who has witnessed it, and who has kindly communicated to me the following description, to form an idea of this cruel, yet brilliant feast, which draws together devotees and the curious, from the most remote parts of India. After ten days' preparation, the procession, or rather the career of the car begins. It consists of three immense socles, placed one above another, and supported by axle-trees, mounted upon wheels. Upon the highest socle, is a canopy, beneath which is placed the niche, which encloses the idol. The ornaments which decorate the car, are magnificent. They employ for this purpose, the richest stuffs, and the most precious jewels. They burn the most exquisite perfumes, in vases placed around the idol, and troops of musicians are seated upon the steps of the car. Bayaders dance and sing hymns, and the brahmins, standing before the idol, fan the god with the *punkah*, (*fans*). They attach cords to the car, of such length, that the thousands of Indians who lay hold of them, may draw it. While on its course, which is one of about twenty miles, the devotees precipitate themselves before it, and are crushed (to the number of from four to five hundred), beneath the wheels of the car, while nothing impedes its progress. Others make incisions in their arms, upon their legs or over the whole body, and, dripping with blood, brave the intense heat of the sun, together with their pain, and follow the procession, uttering cries of joy.

Political leaders have sometimes borrowed their supports from religious ideas, in order the better to cherish a contempt for death, in the hearts of people exposed to frequent wars, or who have become conquerors. Odin, being conscious that his end was approaching, transfixed himself with an arrow, in presence of his friends and lieutenants, saying to them that he was going to Scythia, to precede them at the banquet of the gods. The Scandinavians were accustomed to throw themselves from the top of a rock, in order to free themselves from the infirmities of old age; persuaded that if they devoted themselves to death, they should occupy a more distinguished place in the *valhalla*. The same was true among the Abyssinians. These victims of ignorance and of errors, both religious and political, were not, certainly, suicides. They all yielded to the beliefs, usages, prejudices and customs of their respective countries, which are often more powerful than even the instinct of self-preservation. Christianity, by dissipating pagan errors, removed, wherever it penetrated, the opinion that it is lawful to take one's own life in honor of the divinity, and proscribed this custom; causing, at the same time, to cease, the offering of human sacrifices, which defiled the worship of the gods.

SUICIDE PROVOKED BY THE PASSIONS.

A few words will satisfy the most incredulous, that the passions, when strongly excited, ever produce disturbance, either in the organism or understanding of man. When the soul is strongly moved, by a violent and unexpected affection, organic functions are perverted, the reason is disturbed, the individual loses his self-consciousness, is in a true delirium, and commits acts the most thoughtless; those most opposed to his instinct, to his affections and interests. Thus, terror often takes away the thought of flight, and urges its victim into perils, greater than the danger he would shun. Love deprives him who is powerfully impressed by it, of all those qualities proper for the accomplishment of his desires; while anger and jealousy, lead the man who is endowed with the mildest disposition, to imbrue his hands in the blood of his best friend. A sudden and unexpected trial, love betrayed, ambition disap-

pointed, honor compromised, the loss of fortune, by overthrowing the reason, deprive man of the power of reflection. Does the delirium of the passions permit man to reflect? Do not all laws acquit him who has committed, during the first transports of a violent passion, an act, which would have been criminal had it not been for this circumstance? The actions of a man, transported by a sudden passion, are regarded as performed without free agency; and are judged of, as the effect of a temporary delirium. Strong men, of a sanguine temperament, of great susceptibility, and of an irascible disposition, are impelled to suicide by an impulse so much the more strong, as the impression has been unexpected; and the passion a social one, suddenly called into exercise. But the acute delirium provoked by the passions, is temporary, and the suicide which it provokes is promptly executed. If not consummated, the impulse is not, ordinarily, renewed. The fruitless attempt seems to have been the crisis of the moral affection. The involuntary and acute form of suicide is very different from that which is chronic, and the result of premeditation. Examples of acute suicide produced by disorder of the passions are so frequent, that it will be sufficient for me to point out a small number of them. The trustee of the fortunes of his fellow-citizens, loses at play the money that has been committed to his care. His honor is lost, and he blows out his brains.

A merchant meets with a considerable loss. Fearing that he shall not be able to fulfil his engagements, he goes and drowns himself. A shoemaker, forty-five years of age, dwelling near the Place du Louvre, enjoying good health, and doing a very prosperous business, had passed the day with his family. Very early on the following morning, he opens his shop, and goes to drink, as was his custom, a glass of brandy at the store of the grocer, his neighbor. He returns, and about ten minutes afterwards, his workmen, on coming in to their labor, find this unhappy man prostrate in his back shop. He had laid open his abdomen with a shoe knife, and the intestines had fallen from this cavity. We were informed that he had lost, two or three days previously, a considerable sum, and that he had nothing left wherewith to fulfil the engagements which he had contracted for the day on which he destroyed himself, which was the last of the month, 1820

Mad'e G., who had just married a young man to whom she was attached, has a violent altercation with her mother respecting her husband. She went out hastily. Not seeing her return, her sister was sent to look after her. On passing near the Rhone, the child saw the garments of her sister, floating on the surface of the river. Her mother, who had followed at no great distance, at this sight, escapes from those who were called together by her cries, and at once follows her unhappy daughter. (Vide *Matthey Diseases of the Mind*).

Mad'e S., about thirty-two years of age, surprises her husband in company with her sister. The latter deliberately insults her. She immediately declares to her husband that he shall no longer have a wife, and throws herself from a very low window. It only caused certain slight contusions. They hasten to her assistance. While they are carrying her to her bed, she groans, and expresses much regret that she has not accomplished her designs, and repeatedly assures them that the attentions they are lavishing upon her are of no avail. They offer her drink, but she refuses it, as well as the nourishment which is brought to her. She replies to no question. Her husband testifies the most sincere regret and affection. Far from yielding to his solicitations, whenever he approaches her bed, or speaks to her, her appearance changes, and she becomes convulsed. She passes six days in this condition, nor does any thing succeed in overcoming her resolution to take no nourishment. I was called on the sixteenth day. The patient was very much enfeebled, her eyes were haggard, the pulse feeble, frequent and intermittent, and the skin hot. The patient complained of no pain, but sighed profoundly. She replied

to my questions by nods. I induce her to swallow three spoonfuls of sugared water, which she does with great difficulty. After this she is unwilling to take any thing. The next day she expires, after a general perspiration of some hours. Lucretia cannot survive the outrage which Sextus has committed, and sheathes a poniard in her breast. The Roman generals, in their civil wars, were accustomed to take their own lives after the loss of a battle; ashamed of their defeat, and unwilling to submit to the authority of the victor.

But the most violent passions do not always impel the passionate man suddenly to the commission of acts of fury. When the passion is primitive, or the moral impression has been foreseen, its action is less rapid, especially when it operates upon enfeebled subjects, or those of a lymphatic temperament. The secret prey of hatred and jealousy, and of miscalculations with respect to schemes of ambition and fortune, man arrives slowly, and by successive paroxysms, to the most fatal resolutions. Although acting slowly, the passions do not less enfeeble the organs, nor less disturb the reason. They are not less likely to destroy life, and when time is still afforded to relieve these wretched beings from their peculiar fury, they present all the features of despair, as well as the characteristics of lypemania. Many have made attempts upon their lives, without knowing what they were doing; and many have assured me, that they recollected nothing that they had done. Many also, had singular hallucinations. This, though voluntary suicide, is chronic. It is to this variety, that we are to refer that form of suicide which is resolved upon through hatred or weariness of life; which last, appears to me to offer important considerations. Chronic suicide has, more particularly, given rise to discussions respecting the criminality of self-murder, because it presents the characteristics of a premeditated act. It is not, perhaps, so much with respect to the act, in itself considered, that this dissidence exists; for it is certain, that up to the moment of its execution, he who attempts his own life, almost always resembles a man in a state of despair, connected with delirium. Physical suffering, which often leads to lypemania and hypochondria, also causes suicide. It changes the sensations, concentrates the attention, impairs the courage, and destroys the reason, by modifying the sensibility so as to accord with the prevailing passions. Its action however, is slower than that of moral suffering, and rarely provokes self-murder. The man to whom physical suffering leaves no moment of relief, who perceives not the limit of a long and cruel malady, after having at first supported his ills with resignation, at length becomes impatient. Overcome by sufferings which have for a long time enfeebled him, he takes his life, to put an end to these intolerable evils. He considers that the pain of dying is but temporary, and yields to premeditated despair. It is the same moral condition, that determines the suicide of hypochondriacs; all of whom are persuaded that their sufferings are greater than one can conceive, and are never to terminate; partly, on account of their extraordinary nature, and in part, in consequence of the impotence of art, or the ignorance of physicians. There is no condition which inspires more fear of death, and stronger desires to be relieved from present sufferings, than hypochondria. Hypochondriacs fear to die, from pusillanimity; they dread to live, from weakness. Finally, hypochondriacs converse much respecting death. They often demand it, at the hands of those who are about them. They make attempts, but rarely do they accomplish their purposes; the slightest motives, the least pretext, causing them to delay, or abandon their purposes. They resemble poltroons who talk loudly, in order that they may be regarded as men of courage. The father of Licinius Cæcinius, of pretorian rank, overcome by the pain and weariness attending a long sickness, takes a large dose of opium. Haslam mentions the case of a man who took his own life, being no longer able to endure the sufferings of the gout.

A girl, sixteen years of age, when on the point of being violated by her

own father, experienced such a degree of horror at the thought, that she had violent convulsions. The next day but one, she took at once, an opiate potion, prepared for several days. The symptoms that supervened were very serious, and she remained subject to nervous attacks, very frequent and violent in their character. Two years afterwards, tired of this condition, she swallowed fifteen grains of tartar emetic. She vomited much, and the convulsions were augmented. She was sent to Paris when nineteen years of age. She was tall, of a pretty full habit, and of a rosy complexion. However, she experienced almost constant sufferings, and convulsions the most varied and peculiar. She was successively blind, deaf or dumb, and incapable of walking or swallowing. This state persisted, sometimes for some hours, at others, for a day, and even two days in succession. Sometimes her tongue projected two inches from her mouth, and was tumefied. At other times, the patient could not swallow, whatever efforts she might make. In one instance, she passed seven days without being able to take any thing. I have seen her fall at full length upon the floor; now upon her back, and now her face. I have seen her turn round and round for an hour, without its being possible for four persons to prevent it. I had applied a blister to the left leg, and when she became blind, deaf, mute, or incapable of motion, the application of a single drop of vinegar upon the blistered surface, suddenly restored her sight, hearing, speech and power of motion. After fifteen days, this measure ceased to be of use. All concluded that this patient was hysterical. So often was she told of the benefits that matrimony would produce, that at length she permitted herself to be drawn into it, solely for the sake of being cured thereby. After seven or eight months, seeing no change in her condition, she swallowed twelve grains of tartar emetic. She made the most violent vomitive efforts, and raised a little blood. However, she recovered from the consecutive symptoms, but not from her nervous troubles. In a state of despair, she disappeared. Her relatives and friends believed that she had drowned herself. Four months afterwards, while passing near St. Martin's gate, I felt myself seized by the collar of my coat, and made a strong effort to disengage myself: "You shall not escape me," said a voice which I recognized; I turn, and exclaim; "what are you doing, Mademoiselle? "I am cured. Have I not done every thing for my restoration to health; and endeavored in vain to terminate my deplorable existence? Has not every one frequently affirmed, yourself among others, that marriage would cure me, whoever might be willing to form that connection with me? Well, if the horrible remedy which I am now employing does not cure me, I will throw myself into the river." This wretched being was clad in the tattered garments of the most abject prostitution, was reduced to the greatest misery, and often without the means of satisfying the most pressing wants of nature. Six months afterwards, she had an abortion, and her nervous difficulties, the convulsions and phenomena described above, were, after this event, less intense and frequent. A year subsequently, that is to say, twenty-two months after she began the life of a prostitute, she was confined. From that period, almost all the symptoms disappeared. She retired to the house of a female domestic who had served her, and on her arrival at Paris, was perfectly restored. She begged permission to return to her family, was sometime afterwards married, and became the mother of four children.

When maniacs commit self-murder, they do it without reflection. They usually throw themselves from a height; a circumstance which proves that they obey a blind impulse, by the employment of a means the most easy and accessible. Maniacs are affected by illusions; perceive imperfectly the relations of things, and are often pursued by panic terrors. They are the sport of their sensations, or of the hallucinations which constantly deceive them. One, wishing to descend the stairs, and believing that he is opening the door of his apartment, opens the window, and precipitates himself to the ground.

Another, estimating distances imperfectly, and believing that he is on the ground floor, throws himself out of the window. This latter person, wishes to do violence to a woman who waits upon him, and throws himself from the stair-way of the third story, hoping to arrive at the bottom before she escapes his pursuit. A maniac, impelled by hunger, was accustomed to eat whatever came in his way. He dies suddenly, and on examining his body, they find a spunge that he had devoured, and which rested in the œsophagus. Some maniacs destroy themselves while endeavoring to perform feats of strength and address. There are maniacs who suffer from a violent cephalalgia, and who, by striking their heads against the walls, experience relief. Others believe that they have some foreign body in the cranium, and hope to remove it by *opening the head.* We have seen them destroy life by smiting themselves for this purpose. Maniacs also destroy themselves at the commencement of the disease, driven to despair by the moral affection which has caused the delirium, or coincided with its explosion; the recollection of this affection, not being destroyed by the delirium, which has not yet invaded the entire understanding. This class of patients also take their lives, because they have a knowledge of the disease which is commencing, and which plunges them into despair. There are those who destroy themselves during convalescence from mania, rendered desperate by the excesses they have committed, or ashamed of having been insane. Finally, (we must confess it), there are those who destroy life while making efforts to disengage themselves from means of restraint, unskilfully applied, or to escape from places in which they had been confined. Those who are suffering from a fever, in their delirium destroy themselves, like maniacs.

Every case of monomania may lead to self-murder; whether the monomaniac obey his illusions or hallucinations, or fall a victim to a delirious passion. A monomaniac hears an *internal voice*, which is constantly repeating; *slay thyself, slay thyself;* and he takes his life, in obedience to a superior power, whose mandate he cannot disobey. A man, whose brain was deranged by some obscure and mystical notions, believed that he was in communication with God. He hears a celestial voice which says to him: *My son, come and sit down at my side.* He springs from the window, and fractures a leg. Whilst they are raising him up, he expresses much astonishment at his fall, and particularly on finding himself wounded. A soldier hears an organized hurdy-gurdy. He thinks he is listening to celestial music, and at the same time sees a luminous chariot, which is coming to bear him away to heaven. He very seriously opens the window, extends a leg to enter the car, and falls to the ground.

M. A., of a bilious-sanguine temperament, was addicted to onanism from childhood, though it did not impair the development of his physical and intellectual faculties. He was endowed with a very active imagination, followed Bonaparte into Egypt, and held there an important office. At about the age of thirty-two, some years after his return to France, he was stricken with apoplexy, the effects of which were dissipated by abundant bleedings. Some years later, he fell from a horse, wounding his head severely. This was followed by a furious delirium, of six weeks' duration. From that period, he manifests a slight degree of aberration of mind, and becomes difficult, querulous, and subject to transports of anger. After two years, he suddenly resigns a very important post, on pretext of devoting himself entirely to a project which he had long before conceived, and which consisted in uniting all people under the government of the Emperor. From that period, either from regret, or from want of occupation, the ideas became more disturbed, and he sets himself to tracing upon paper, the plan of an edifice, which shall have as many compartments as there are different tribes of men; with a centre, for the chief of all the assembled people. This plan was made and re-made, drawn

and drawn again, several times, with the addition of innumerable and very inexact calculations. Two years pass away, in the most persevering occupation, in order to finish the plans, and to submit them to new calculations. He now experiences a keen moral affection. He is anxious to execute his pretended project, and begins, by causing his château to be pulled down, and making a smooth place, in order to construct the foundations of the new edifice. Every representation which is made with respect to his project, excites his anger. After several acts of violence, always provoked by the obstacles which he experiences in the execution of his design, he is brought back to Paris, half pleased and half sad, at the idea of entirely abandoning his preparations. He then persuades himself that he ought to perform some brilliant act. In order to prove that he has received a special mission, and to control public opinion, he assembles together the poor, seats them at table, and serves them as a domestic. He throws himself into the Seine from the Pont Neuf, and regains the shore without accident. This first proof confirms him in his opinion. The next day he goes into the streets, throwing himself beneath the wheels of the heaviest carriages, assuring all that he cannot be wounded. The day following, they prevent him, when about to jump from the window of his chamber. Whilst they bear him to his bed, he bitterly deplores the ill success of his efforts, and complains that they do not understand him, and of the obstacles which they oppose to his designs. He is placed in a house devoted to the insane. He several times endeavored to perform extraordinary feats, which would compromise his life, and always, to prove his mission. At length he was convinced that they would permit him to make no further attempts. *Well*, said he one day, *since they prevent me, I will do no more.* He engages in writing out upon the walls, and on paper, his project for the reunion of all people. By degrees, his sentences, even upon this subject, indicate less connection and coherence of thought. Five years after his first attempts at suicide, he writes words, whose letters, instead of being placed horizontally, are written one above the other; or else he makes figures without order, to which he gives strange appellations. He is however rational, when he speaks of things foreign to his delirium. He is so entirely occupied in writing his letters, words, lines and figures, which he calls his work, that he rises at earliest dawn, and sometimes refuses to eat; pretends to be more entirely engrossed than any other man, retires reluctantly, and speaks of his labor as a man devoted to study, or to a most important undertaking, would do. During the heats of summer, he suffers from nervous agitation, when he cries both night and day; speaks of his undertaking, and complains of not being able to execute it. He has not again made the slightest attempt to establish his mission.

Dr. Marc has made us acquainted with the following case,* published by Dr. Ruggieri, an apothecary at Venice. It indicates the influence of lypemania, over the determination to self-murder, and the obstinacy of those patients who are subjected to it. Matthew Lovat, a shoemaker of Venice, who was controlled by certain mystical notions, castrated himself, and threw the genitals out of the window. He had prepared himself beforehand, with every thing necessary to dress the wound, and experienced no serious consequences from it. Some time afterwards, he persuaded himself that God had commanded him to suffer death upon the cross. He reflected two years upon the mode of executing his project, and occupied himself in preparing instruments for his sacrifice. At length, the day arrives. Lovat crowns himself with thorns, three or four of which penetrate the skin of his brow. A white handkerchief, tied tightly around the flanks and thighs, conceals the mutilated parts. The rest of the body is naked. He takes his seat upon the middle of the cross, which he has made, and adjusts his feet upon a bracket, which was attached

* Medical Library, Sept., 1811.

to the inferior branch of it. The right foot reposes upon the left, and he transfixes them both, with a nail five inches in length, which he drives, with a hammer, to a considerable depth into the wood. He then transfixes successively, both his hands, with long and very sharp nails, by striking the heads of them against the side of his chamber. He then raises his hands thus pierced, and brings them in contact with those which he had previously placed at the extremity of the two arms of the cross, in order to cause the nails, there placed, to penetrate his hands. Before nailing the right hand, he avails himself of it, to make, with a sharp shoemaker's knife, a large wound in the left side of his chest. This done, with the assistance of cords previously prepared, and slight movements of the body, he causes the cross to slip, which falls outside of the window, and Lovat remained suspended in front of the house. On the following day, he was still there. The right hand, alone, was detached from the cross, and hung by his side. They removed the wretched man from this terrible situation, and brought him immediately to the Imperial clinical college. M. Ruggieri perceived that no wound was mortal. Lovat recovered from his wounds, but not from his delirium. It was observed that during the exasperation of the delirium, he did not complain, whilst he suffered dreadfully, during his lucid intervals. He was transferred to the hospital for imbeciles, where he exhausted himself by voluntary fasts, and died phthisical, April 8th, 1806.

Nostalgia leads to suicide. The *ranz des vaches*, and the notes of the bagpipe, through the influence which actual sensations have over the ideas and recollections, produce regret at being no longer in the country of their birth; and grief, at being removed from the objects of their earliest attachments. Hence, springs up a violent desire to revisit the places where they were born. The emotions thus awakened, together with their despair at being separated from those objects which call them into exercise, rise superior to all other feelings, and both Swiss and Scotch soldiers destroy themselves, if they cannot desert. How many lypemaniacs, who believe themselves pursued by robbers, or agents of government, destroy themselves, in order to avoid falling into their hands! Some make no estimate of the danger they run, in order to effect their escape; while others prefer certain death, to the torture and disgrace which are preparing for them. How many, who believe that they are betrayed by fortune and their friends, destroy themselves, after a struggle of longer or shorter duration! They take their lives as do men, whom a passion urges slowly, to the commission of self-murder.

M. B., about forty-three years of age, after having become exhausted in the discharge of public duties, which are committed to him, falls a victim to an act of injustice, and soon becomes insane. They conduct him, contrary to his wishes, to an estate. He then persuades himself that his wife has denounced him, and that he is ruined by the government. On the following day he shuts himself up in his study, places the barrel of a fowling-piece in his mouth, and with a horseman's pistol springs the trigger. Fortunately the direction of the gun is changed, and the charge passes through the cheek, throwing him down. His relatives hasten to him, but he refuses all assistance. However, they bleed him, and bind up his wounds; and although he submits reluctantly to the attentions that they bestow upon him, the wound is disposed to heal. The patient testifies the most violent hatred towards his wife; a circumstance which, joined to his delirium and threats to take his own life, determines his family to send him to Paris. At his arrival, the wound is not cicatrized, and the patient is sad and thoughtful. He converses little, walks about like a man absorbed in thought, and often raises his hands to his head. His face is sometimes flushed, his complexion sallow, constipation is obstinate, and there is insomnia. However, he assures us that he is not unwell, rejects every remedy, and receives the physicians with reluctance. He

is apparently very composed, reasons with remarkable correctness, but threatens, from time to time, to throw himself from the window, especially when spoken to respecting his health. At the expiration of fifteen days, notwithstanding the most careful attention, he escapes from his hotel, and they find him hastening towards the quays remote from the centre of the city, in order to throw himself into the Seine. He is then committed to my care. After five months' retirement, and apparent composure, he experiences pains in his bowels, and cephalalgia, which are exasperated on alternate days. He refuses every remedy, never leaves his apartment; takes no part in ordinary affairs, and diverts his mind neither by reading, nor any manual occupation. Notwithstanding, he receives me kindly enough, and converses willingly on every variety of subject, excepting his own disorder, his wife, and a cousin who had prevented him from throwing himself into the river. No sooner do I touch upon either of these three topics, than his eyes kindle, his face flushes, he quits his arm-chair, and walks about at a rapid pace, irritated, and ready to give way to his anger. During the course of the fifth month of his retirement, and the sixth of his disease, he appeared to me more accessible to means employed for his diversion. He had consented to play a game at draughts in his apartment, and to take a laxative drink. I invited his wife to pay him a visit with his children; informing her distinctly at the same time, that his prejudices against her had not ceased, and that his reception of her would be perhaps, exceedingly painful; but that a moral commotion would be very serviceable to him. On the day appointed, Mad'e B. and her children, without being announced, present themselves to the patient. The latter immediately exclaims, with a threatening gesture; "Retire, Madam, retire." The courage of this lady, so devoted to her husband, does not sustain her. She finds herself feeling unwell, and it is necessary to assist her to withdraw from the apartment. Her husband retains part of the children, speaks to them in harsh terms of their mother, and shortly after sends them from his apartment. I remain alone with the patient, who walks at a rapid rate, like a furious man who has not a word to utter. After some minutes, he approaches me, who had remained motionless, seized me by the collar, and says several times: "What are you doing there like a post, do you feel nothing? How can I fail to be moved by this circumstance, of which I have just been a witness?"

His hasty walk begins again; and after the lapse of half an hour, he lies down upon his bed, and I leave him alone. An hour afterwards, he is sitting up when I come in: "Well said I, approaching him, you are more composed, will you listen to the truth? Is it possible that you could thus treat the wife who adores you? She is in an alarming condition; and is this the price of the consolation that she has been accustomed to offer you? How poignant should be your regrets!" The patient preserves a sullen silence, but is profoundly moved. In the evening, I inform him that I have conducted his wife to her residence, and left her in an exceedingly trying condition. Same silence. Two days after this, he sees his children, and speaks to them unkindly respecting their mother. On the same day, I inform him that his wife is very ill and that her condition is the result of the reception that he had given her. On the fifth day he sees his children, but says nothing respecting their mother. During the day, he asks permission to go and see his wife. "You shall not see her, sir, said I. Would you still aggravate the frightful condition which you have caused?" These words are uttered in a decided tone. On the sixth day, he receives a visit from his children, and is more affected. He enquires also, after his wife. In the evening, I inform him that the health of his wife has improved.

On the seventh day, he manifests some regret at what has transpired, and we converse in a tone of confidence. He asks permission to visit his wife,

which I grant. At the hour for dinner, he says that he will dine at home, and sends me a note of invitation. During the hours preceding and following dinner, he conversed with his wife and children, on general subjects and matters of no special interest. From time to time, however, he addressed his wife in terms of reproach, and with insolence; but in a voice so low, and with such precautions that his children did not hear his remarks. At ten o'clock, I go to his residence. He appears gay, receives me with an appearance of satisfaction, and we retire together. Two days after this, he returns to his family, where, for some days, he is very irascible, unkind to his wife, but very affectionate towards his children, relatives and friends, who visit him. A few months later, he was called upon to perform certain very important duties. He supports the disquietudes, fatigues and menaces, to which certain public functionaries were exposed, during the earliest period of the invasion of 1814. However excellent might be his health, and however important the duties which he had to fulfil, he could hear no one speak of the estate where he first attempted suicide. He would not permit his wife or children to go thither; and it was a year after his cure was regarded as complete, that having sent his wife and children before him, he returned to his province.

An ecclesiastic thoughtlessly swallows the seal of a letter that he has just received. One of his friends smilingly said, *you have sealed up your bowels.* This idea takes possession of the mind of the ecclesiastic, and after two days, he refuses all nourishment, convinced that it cannot pass. They administered to the patient, says Darwin, purgatives which acted powerfully, without effecting a cure. They succeed at length, with difficulty, in causing him to drink a little broth. He soon refuses to swallow, and shortly dies. Was this an error of volition, as Darwin pretends? Would not Barclay have said, that there was a vicious association of ideas, which led to a fatal determination? Weariness of life, has not been sufficiently distinguished from hatred of it, when writers have enquired into the determining motives to self-murder. Notwithstanding, these two conditions of the mind are very different. Hatred of life is an active state, and supposes a sort of irritation and exaltation of the sensibility. Weariness of life is a passive state, the effect of *atony* of the sensibility. Hatred of life is frequent, because a thousand circumstances provoke it. It spares no class of society, and most frequently attacks men abounding in wealth and dignity, because they possess more passions, which are called into active exercise. A prey to vexations, either real or imaginary, or to a chronic passion, man, at first disgusted with life, ends by hating it, and destroying himself. I ought finally to state, that words here but imperfectly express the ideas which they are designed to convey, and that from this circumstance, discussions have sprung up respecting hatred of life and desire of death. In fact, they have no aversion to life, but hate the sufferings which traverse it, and have a horror of their uneasiness. They do not desire death; but wish to be delivered from pains, oppositions and vexations, and have recourse to death as the most certain means. Suicide, determined by hatred of life, forms one of the distinctions which we have already established. It appertains to lypemaniacal suicide, or to suicide produced by a chronic passion; according as the causes which occasion hatred of life, are real or imaginary.

Weariness of life, the *tædium vitæ*, leads to self-murder. Although weariness may be a passive condition, it is, in some instances, not the less a motive of action. Such has been the opinion of many philosophers, and I have observed, that weariness determined certain monomaniacs to do what had appeared most repugnant to them, and that they were cured by efforts made upon themselves, from excessive ennui. Ennui, at the epoch of puberty, originates in a vague desire, the object of which is unknown to him who experiences it; and this want gives rise to an inquietude, which occasions sad-

ness, terminating in weariness. The most common effects of this tediousness are, decay, feebleness, and sometimes suicide: a phenomenon noticed by Hippocrates among young girls, who either have not, or but imperfectly, menstruated. Ennui recognizes moreover as a cause, the cessation of engrossing occupations; the transition from a very active life to one of repose and idleness, when no occupation for the mind or affections of the heart have been previously formed. Weariness is also the effect of the abandonment, either forced or voluntary, of the fashionable world, and frivolous pleasures; when the individual remains isolated, and without any interest whatever. It is so much the more fatal, when, having no aptitude for the arts and sciences, one is deprived of the resource of pleasures, in consequence of having abused them.

Man must have desires, or he falls into a state of painful weariness. But if he has exhausted his sensibility by the excessive exercise of the emotions and the abuse of pleasures; if, having exhausted all the sources of happiness, there is nothing more that can cause him to feel that he still lives, and all external objects are indifferent to him; if, the more means of self-satisfaction he has enjoyed, the less numerous are the new objects which he meets with that are calculated to awaken his interest; man then occupies a frightful void. He sinks into a state of satiety; a terrible weariness, which conducts to suicide. To quit life, is to him an act as indifferent as that of leaving a splendidly furnished table, when he no longer desires food, or to abandon a woman whom he formerly adored, but whom he no longer loves. That form of suicide which is called splenic, is chronic. It is executed with coolness and composure. Nothing announces either violence or effort, like other forms of suicide. Finally, those who suffer from the spleen, present all the characteristics of melancholy. The most frequent causes of spleen are debilitating, and act upon the nervous system. Such are the abuse of pleasures, onanism, and the immoderate use of alcoholic drinks. There is the same change of disposition and habits; the same indifference towards the dearest objects; the same physical symptoms; loss of appetite, insomnia, constipation, emaciation or œdema; the same concentration of the attention upon a single idea; the same integrity of the understanding upon every other subject; the same perverseness; and the same dissimulation in the execution of the determinations in the former as in the latter.

I have strong reasons for believing that the spleen is a very rare disease, even in England. We too often attribute the suicides of the English to weariness of life, because England is the country in which most frequently the people have recourse to it. The English without doubt, suffer most from this distressing weariness; still many other motives than this give rise to suicide among them. I have had charge, as well in establishments for the insane as in my private practice, of a great many individuals, who have either attempted, or taken their lives. I have seen no one who was driven to suicide in consequence merely of weariness of life. All had determinate motives, real or imaginary vexations, which led them to loathe existence. I have even been deceived sometimes in this respect. A man in the enjoyment of a splendid fortune, had given himself up to the practice of masturbation. Nevertheless he was strong and in good health, and with no other cause of grief than the recollection of the horrors of the revolution, whose principles, besides, he approved. He made several attempts to commit suicide, and often called for pistols, wishing to die by means of them. During the two years that I had charge of him, he was not for a moment irrational. He was gay, agreeable and very well informed, saying to me sometimes; *give me a pistol.* Why do you wish to destroy yourself? *I am weary of life.* It was only after the lapse of two years, that he acknowledged to me that he had hallucinations of hearing and sight. He believed that he was pursued by agents of the police. He

both heard and saw them through the walls of his apartment, which, he added, are lined with planks having slides, in order that they might both hear and see, what he said and did.

I have often met with a variety of suicide, of which authors have not spoken; and which is in many respects analogous to the spleen. There are persons who, in consequence of physical causes, or variable morals, fall into a state of physical prostration and moral discouragement. They have little appetite, a dull and deep-seated pain in the head, heat in the bowels, borborygmi and constipation. Nevertheless, their external appearance indicates no grave disorder of the health. Among women, the menses are sometimes suppressed. At a later period, the features of the countenance with this class of patients are shrunken, the look fixed and uneasy, and the complexion pale and sallow. They complain of a racking pain at the epigastrium; of a heaviness of the head, which prevents thought, and of a torpor and general lassitude, which render effort impossible. They move not, but prefer remaining in bed, or sitting quietly, and are impatient when we desire them to take exercise. They abandon their ordinary occupations, neglect their domestic duties, and are indifferent to the objects of their former affections. They no longer engage in business, and are unwilling either to converse, study, read or write. They dread society, and especially the importunities to which this malady exposes them. Weighed down by a sense of their condition, they entertain gloomy meditations; and at length, in despair on account of their real or pretended worthlessness, which they believe can never be surmounted, they desire death, call for it, and sometimes devote themselves to it; wishing to die, since they believe that they can no more fulfil their duties towards their families or society. These patients do not reason irrationally. Their impulse to suicide is stronger in proportion as their occupations have been more steady, and their duties numerous. I have seen this malady continue for a few months, and also to persist for two years. I have seen it alternate with mania, and with perfect health. Some patients were for six months either maniacs or in the enjoyment of good health; and for an equal period, overcome by a sense of their physical as well as intellectual and moral weakness, which caused them to desire death.

M., thirty-two years of age, tall, and of a strong constitution, having never been sick; the descendant of a father who, after having acquired a large fortune, died in possession of little property, had received a thorough education with a view to carry on to its greatest extent, the trade of a locksmith. He is married at the age of twenty-seven years, to a woman whom he adores. He has engaged in several undertakings, which have not succeeded; a circumstance which has too severely afflicted him; discouraging and rendering him slothful, without however impairing his health. Although depressed in mind, he engaged in enterprises which promised great and favorable results. He begins his labors with zeal; but at the expiration of a month, on meeting with slight difficulties, he is unduly affected by them. He is discouraged; believes he is ruined; incapable of accomplishing any thing; and is unwilling to leave his bed to oversee his workmen, or to direct their labors; thinking that he is destitute of those qualities and the vigor necessary to bring his enterprises to a favorable issue. He suffered at times from vertigo, from heat in the bowels, and constipation. His affection for his wife and children, together with the care of his interests, were of no avail in relieving his depression of mind. He was impatient even, when his wife repeated her advice. He took a very correct view of his situation, but made no effort for his relief. Eight days passed thus. Suddenly he was well; manifested all his activity in his business, and all his affection for his family. Relapses occurred ten or twelve times at irregular intervals, and were provoked ordinarily by some slight opposition, or by difficulties which would not have occasioned them in any other

state of health. Whilst these paroxysms lasted, the patient felt dull, and his mind was embarrassed. He suffered from epigastric pains; remained in bed, ate little, and wished to see no one. Despair, in consequence of his inaptitude, of being a burthen to his family and of not being cured, often urged him to suicide.

L., thirty-four years of age, was admitted into the Salpêtrière Sept. 23d, 1819. She was the offspring of healthy parents, and had the small pox when eight years old. She menstruated at the age of fifteen, married at twenty, and had a child when twenty-one. After her confinement, she had an ulcer on the foot, which was cured at the expiration of about six months. From that period she suffered from cardialgia; at first, fugacious and slight, then constant and very intense; attended with vomiting of food. After her second pregnancy, which occurred at the age of twenty-seven, the symptoms became more grave. She believed that she had a cancer of the stomach, and worried much on account of it. When about thirty-three years of age, she becomes undecided in her ideas and actions; no longer wishing what she formerly ardently desired. Her thoughts were at times incoherent, though her husband did not notice it. Nevertheless the menstrual flow was natural. After six months there was insomnia, and a painful sense of constriction at the root of the nose, paleness of the face, and a change in its features. Her look is fixed and sometimes haggard. She suffers from pain at the stomach, and a sense of constraint and obstruction at the epigastrium, which prevents motion. She abandons her ordinary occupations and the cares of her household. There is sadness, tears, voracity or want of appetite, a desire and temptation to suicide, produced by the regret of being no longer of any service in society, and of feeling no longer any affection for her family. Such was the condition of the patient at the time of her admission into the hospital. She was put upon the use of acidulated diluent drinks and tepid baths. Three months after this her mind was more composed, and the patient called for occupation. She gives a more favorable account of her situation, but always complains of a fullness and racking pain in her abdomen, of menstrual suppression, and obstinate insomnia. I prescribed the whey of Weiss, and a blister to the neck. The irritation produced by the latter, obliged us to place it upon the left arm. The dejections, at first consistent, became abundant; sleep improved; and hope again revived in the breast of the patient, who labored with satisfaction. In February, 1820, her complexion had become clear, her physiognomy composed, and her ideas more distinct and ready. On the twenty-third of March, she was restored to her family, although the menses had not reappeared, but fully resolved to renew her usual occupations. She kept her word. The menses were established during the month of April. From the time of their appearance, she was a little more active than natural; was more loquacious, and moved about more freely; sought again the toilet, and was less sedentary. In the month of Sept. 1820, she became fearful of a relapse, and experienced a feeling as if a bar extended across the epigastrium, from one hypochondrium to the other. The features of the countenance change, and there is insomnia. These premonitory symptoms of a relapse persist for two months, in spite of all the efforts made by the patient in her own behalf, and the medicines that I advised. In the month of December, the same apathy that formerly existed, the same despair of ever being able to accomplish any thing, and of being past cure, lead to gloomy thoughts, and awaken a desire to terminate a life, whose duties she can never fulfil.

There are persons who, amidst fortune, grandeur and pleasures, and enjoying the perfect use of their reason; after having embraced their relations and friends, set their affairs in order, and written excellent letters, clip the thread of life. Do they yield to a delirious resolution? Yes, unquestionably. Is it not true that monomaniacs appear rational, until an external or internal im-

pression comes in suddenly to awaken their delirium? Do they not know how to repress the expression of their delirium, and to dissemble the disorder of their understanding, so as to deceive the most skilful, as well as persons who live with them on terms of intimacy? The same is true of some individuals, over whom the purpose to commit suicide holds complete sway. A physical pain, an unexpected impression, a moral affection, a recollection, an indiscreet proposal, the perusal of a book, kindle up anew the dominant thought, and instantaneously provoke determinations the most fatal, in the breast of an unfortunate being who, an instant previous, was perfectly composed. That then happens, which took place in the case of the maniac detained at the Bicêtre, of whom Pinel says, that the revolutionists set him at liberty, because he appeared to them perfectly sane. They led him forth in triumph, as a victim of tyranny, when being excited by the vociferations and the sight of the arms of his liberators, he suddenly fell upon them, sabre in hand.

Does not the fury of the homicidal monomaniac burst forth instantaneously, so that no antecedent circumstance may have forewarned the victim? We cannot deny that there are individuals whom a fatal inclination leads to suicide, by a sort of resistless charm. I have never seen such persons; and I dare say that if those cases had been more carefully studied, in which they pretend that the patients obeyed an insurmountable impulse, it would have unfolded the motives which led to their determination. There are suicides as well as other insane persons, of whom we speak, as of unfortunate beings, who are obeying a blind destiny. I believe that many persons have learned to read the thoughts of these patients, and proved that their determinations are, almost always, the result of motives and the logical consequence of a principle, though it may be, in truth, a false one. There are persons, however, who, in thé midst of good fortune, destroy themselves. Voltaire, sustained by certain striking examples, pretends that it is those who are distinguished for their good fortune who voluntarily terminate their existence, and not the man who is the victim of want, and compelled to labor for his subsistence. This proposition is false. Misery leads to suicide, and self-murder is most frequent during years signalized by calamities. Amidst ruin and famine, suicides are frequent. During the horrors of a siege, the besieged destroy themselves. Amidst defeats, soldiers take their own lives. Self-murder takes place during great political convulsions. The fortunate of the age destroy themselves; but good fortune, says Jean Jacques, has no external sign. To judge of it, we must read the heart of the man who appears to be happy.

W., thirty years of age, and enjoying excellent health, solicits the hand of a young lady who is to secure his happiness. A few days after marriage, he destroys himself. It was neither errors of regimen, nor good fortune which led him to commit this act, but the disappointment of not having found his wife such as he had flattered himself she was.

A man twenty-seven years of age, like the former, married to a charming girl, at the expiration of six months after marriage, makes a thousand attempts upon his life. Because his wife is of a sedate and quiet disposition, this unfortunate man persuades himself that she is unhappy, that he is the cause of her unhappiness, and that she can never enjoy herself with him. He was wealthy, and a man who was held in the highest estimation; had a charming wife, and all in the province regarded him as at the summit of happiness. Thus the individual whom we believe happy, is racked with inward griefs, and tortured by some passion. The splendor by which he is surrounded, does not permit us to see the anguish of his soul. A man who should destroy himself, and who should be at the same time truly happy, would be a phenomenon of which human reason cannot conceive. When it is said that men most eminent by their rank, fortune, and the consideration which they

enjoy; in fine, that men in appearance the most happy, destroy themselves, it is true; because they, more than others, are influenced by a great variety of causes which impel them to this fatal decision.

SUICIDE PRECEDED BY HOMICIDE.

Who will ever reveal that disorder of the organism, which urges on the madman who desires his own destruction, to acts the most atrocious, before executing his deplorable resolve? I will not attempt a task so difficult. The facts which acquaint us with the motives which determine the greater part of these wretched beings, are not few. It is remarkable, that all the cases of suicidal monomania which have been published previous to this period, present striking analogies one with another; and that they offer indications of mental alienation, particularly of lypemania. Almost all homicidal suicides are lypemaniacs, controlled by a passion carried even to delirium; but aside from this, enjoying the use of their reason. Certain motives, more or less plausible to their minds, determine them, and they select for their victims the objects of their strongest attachment. They commit the homicide with composure, at least in appearance. After having consummated their purpose, they are not disturbed, nor uneasy. They are more composed after having committed it than before, and sometimes appear content. Some make a declaration of their crime to the police and tribunals, or speak of it to those they meet. Far from concealing themselves, they await the period of arrest, and demand that they may suffer capital punishment. The form of suicide which succeeds an act of homicide is usually acute; sometimes however, it is chronic, and offers all the characteristics of a reflected and voluntary act. I have seen monomaniacs take their own, after having taken or attempted to take, the life of another.

M. H., twenty-seven years of age, is for several days in a state of acute mania. He falls to beating with a chair, a woman whom they place near him, and whom he thinks they desire to make a substitute for his mistress. He wounds her, and is so excessively frightened at the sight of blood, that he precipitates himself from the window of the fourth story.

A lady, during an attack of lypemania, which caused her to fear being arrested, condemned, and conducted to the scaffold; rendered desperate by the grief which she thinks she shall cause her husband, endeavors to take his life, by beating him on the head with a stone, before destroying her own.

The Journals reported the case of a Belgian lady in 1815, who, after having thrown four of her children into a well, precipitated herself into it after them. She would have subjected a fifth to the same fate, had he not escaped her. She had also sent a poisoned cake to a sixth, who was abroad at school.

Mad'e R., thirty-two years of age, the offspring of a melancholic father, of a bilious-sanguine temperament, at the age of eight years meets with a fall upon her head, from which she suffered for a long time. Her mother feeling for her little attachment, she was boarded away from home until near the time of her marriage. Having menstruated at the age of fifteen, she married at sixteen. At nineteen, a second pregnancy was succeeded by melancholy, with some thoughts of suicide. This condition was dissipated by a third pregnancy. When thirty-one years of age, during a fourth pregnancy, she preserved her gayety, and enjoyed very good health. Her confinement was a happy one, and she nursed her infant. She exhausts herself however, and becomes emaciated. At the eighth month of lactation, she becomes sad, impatient and irritable towards her husband. She was heard to complain that she had children. She is impetuous in her treatment of her nursing child. Several times, she was observed to press it, as if with a view to stifle it. In one instance,

during the absence of her husband, she threw it out of the window. From that time, they permitted her to have charge of her child only while nursing. Some days subsequently, there was sadness, insomnia and inappetence. She was apathetic, and knew not how to behave. She felt incapable of doing any thing, deplored her own and the misfortune of her children; persuaded, that both herself and husband were ruined. She saw her children clothed in rags, running about the streets, holding out their hands for charity. This thought filled her with despair, and led her to form the resolution to destroy them, and afterwards herself. However, maternal tenderness maintained its sway. If she would caress her children, or if indeed she approached them, she shuddered, and the purpose of slaying them immediately recurred to her mind. A moment afterwards, she deplored her situation, formed the resolution to resist these horrible designs, and responded, by promises, to the exhortations of her family.

After several months, she desired to change her residence: saying, that if removed, she should not injure her children. She was accordingly sent into the country among her friends. She appeared more composed, and manifested a desire to return to her children. Her wish was gratified; but, a few days afterwards, the same thoughts awoke again in her breast, and she was sent back into the country. I was consulted in the month of December, and advised her husband to keep her until spring. During the three winter months, she went and came; had alternate seasons of composure and excitement; was much emaciated; and her complexion was pale. She swallowed some of the oxyd of copper, that she had collected by scouring utensils of this metal, and made several efforts to throw herself into the water. One day, when most sad, her mother proposed to her to go into the country; "Let us go immediately," said she smiling. On the way, she was in very good spirits, hoping to find the rat's-bane which she knew had been sprinkled about the house; but her mother, having penetrated the cause of her contentment, had sent to prevent it. On arriving at her residence in the country, she hastens all over the garrets, but finds only a morsel of the paste which had escaped the search of the domestics. This she swallows, without however suffering any inconvenience.

She is committed to my care April 10th, 1816. Her complexion is sallow, her cheeks flushed, her eyes haggard. There is emaciation, a burning skin, headache, pains at the epigastrium, obstinate constipation, and pains in the region of the urinary organs. She remains sad and silent; and is tranquil until nine o'clock at night, when she becomes agitated, swears, reproaches and abuses her absent husband, and complains of having been sent to Paris. During this time her countenance is very much flushed, she walks about rapidly and with naked feet, threatens those persons who surround her, and howls. Nothing can, for an instant, divert her attention, nor produce composure of mind. At five o'clock in the morning the paroxysm ceases, and is followed by an abundant flow of tears. At my visit, she demands her liberty. "Can you have forgotten your vociferations, and the transports of the night?" No, no, sir, but I have to complain of the ill treatment of my relatives, and of my present confinement, which is unjust, since I am not insane. The paroxysms are renewed almost every night, and at nearly the same hour; rarely taking place during the day. They are announced by redness of the face, and characterized by frightful oaths, horrible cries, and reproaches against her family; by insults and threats towards those who surround her, and by pelvic pains, which exasperate her. I ordered a laxative drink, and a vapor bath, daily. From the commencement of the month of May, I order a tepid bath on alternate days, a douche during the bath, and the vapor bath every evening, with cold water to the head.

May 25th, at four o'clock in the morning, she has a paroxysm, which proves

to be the last. At half past seven, the housekeeper, to whom I had given my instructions, enters her apartment, and with a firm and assured tone rebukes her, and assures her that she shall no longer remain in her house; and finally, if she does continue, she shall spend the remainder of her life, and that, with the approbation of all her friends. The patient is struck dumb, on hearing such language from a lady who had heretofore treated her with much civility, and in whom she had testified great confidence during her lucid intervals. After some moments of thoughtful silence, she promises to make an effort to control herself. On the same day, she asks permission to visit the housekeeper, but is refused. The domestics had been ordered to observe the most perfect silence. This privation was continued for three days, during which, calm and thoughtful, she was accustomed to walk in the garden, and was admitted to the table of convalescents. The trial having passed, on the 28th of May I permit her to see the housekeeper. On meeting, these ladies embrace, and Mad'e R. thanks the matron for her firmness, and weeps with her, in view of the dreadful nature of her disease.

From this epoch, I observed a most favorable change. The patient can comprehend the language of friendship and attachment. She accepted those means of diversion that were proposed, and I begin to encourage her, in opposition to that fear which she entertained, that she should never recover. The Seidlitz waters not relieving the constipation, I had recourse to Ol. ricini, which provoked abundant dejections. About the middle of June, she became decidedly convalescent. She was more cheerful, her sleep was better, and the pelvic pains had ceased. She does justice to the tenderness of her husband, and the affection of her relatives, and desires to return to the bosom of her family; yet without manifesting impatience or obstinacy. She takes a very correct view of her past condition, and was grieved in consequence of it, but did not despair. On taking leave of us, she went to reside among her relatives; and the sight of her mother was most gratifying to her. On the 14th of September, she was restored to her family, and passed another month at Paris, in diversions constantly renewed; after which she returned to her husband and family, whom she regarded with the same affection as before her illness. One year subsequently, the husband of Mad'e R. died. Excessive grief, occupations foreign to her habits, affairs of interest which it was necessary to arrange, together with the diminution of the means of subsistence, far from impairing her health, confirmed it: for until then, she felt that something was wanting, of the plenitude and activity of her faculties. Such is the confession which, ten years afterwards, this lady made to me, having had another attack, attended with different symptoms, and continuing longer than the preceding.

A lady, thirty-six years of age, and the mother of a family, nursed her infant. In consequence of certain moral affections, she was seized with a desire to die. But said she, *I have not the courage to take my own life; and in order to cause the law to require it, I must take the life of some one;* and in fact she attempted to slay both her mother and children. When brought to our hospital she was very much emaciated, sad, spoke not, refused to eat, and wished to take no remedy. She presented all the characterestics of profound melancholy. The threat that she should otherwise be covered with vesicatories, induced her to take some of the whey of Weiss, which relaxed her bowels. The extract of bark and musk were given for more than a month, when we returned to the use of purgatives. The patient was less sad, but often repeated; "I must slay some one, in order that I may die." She was bathed during the intense heats of summer, and received the douche several times during the month of September, and a second vesicatory is also applied. She appeared at this time, manifestly better, and her relatives desired to remove her during the month of October. She was then emaciated, but her

complexion was clearer, and the features of her face less shrunken; she took exercise more willingly, ate and slept well, and spoke no more of taking the life of any one. Nevertheless, the menses had not reappeared. I have understood, that on being restored to her family, this woman had resumed her former habits and enjoyed very good health.

Crichton* cites several examples of homicidal suicide, taken from German authors. Those unfortunate beings who constitute the subjects of his observations, being unable to resolve to destroy themselves, have taken the lives of others, hoping thereby to be condemned to death. Examples of those who, during a paroxysm of jealousy, of anger or revenge, have slain the object of their passion, and then themselves, are not rare. We had at the Salpêtrière, a woman who desired to hang herself. Her brother, having become enamored of his own sister, on learning that she was about to be married, stabbed her, and threw himself from the window. A shoemaker, for ten years a melancholic, imagines that the purchase of a house that he has made, has been the cause of his own misfortune, and that of his wife. During a fit of despair, he slays his wife, three of his children, and would have slain the fourth had he not escaped his rage. After this horrible sacrifice he lays open his own abdomen, and the stroke not being mortal, he drew again the instrument, and transfixed his heart. This man enjoyed a good reputation, and was of a mild disposition.

Thus, among those wretched beings who destroy others, before taking their own lives, some obey those vehement passions which lead them quickly to this double homicide. Others are aroused by passions whose effects are slow in manifesting themselves. There are those who are unwilling to destroy themselves, through fear of eternal condemnation; knowing that suicide is a great crime, for which they could not obtain pardon. They are however, certain of being condemned to death after taking the life of a fellow-being, and hope to have time, before their punishment, to reconcile themselves to God, and to prepare for a happy death. There are those who slay the dearest objects of their affection, in order to preserve them from the trials of life and the dangers of condemnation. Finally, we have seen those who slew the objects of their tenderest attachment, being unwilling to be separated from them, and believing that they should be reunited after death. Is it possible to believe that such a violation of the fundamental laws of nature; such exaltation of the imagination; such perversion of the sensibility; can be compatible with the enjoyment of sound health and the integrity of reason? Must he not, on the contrary, have reached the extreme limit of delirium, who resolves to take the life of the wife whom he tenderly loves, and the children whom he adores? Does he not abandon himself at once, to acts most opposed to natural laws, and the instinct of self-preservation? Notwithstanding, many facts prove that these unfortunate beings, aside from this act, both before and after its accomplishment, are composed and rational. Do we not observe this composure and reason among those maniacs who, from the slightest motives, from the most trifling opposition, give themselves up to the commission of acts indicative of the blindest fury? It is not the signs of delirium on the part of those who commit suicide, that are wanting; but observers who are at hand to see all, and to see correctly.

Reciprocal suicide is that act by which two individuals slay, one the other. It is generally the delirium of some passion, and sometimes extreme wretchedness, which lead those who are their victims, to devote themselves to death. The same passion, leading to the same determination, finds a certain charm in dying by the hand it adores. Examples of this form of fury are not rare,

* An Inquiry on the Nature and Origin of Mental Derangement, London, 1798, 2 vol. in 8vo.

and we can trace them back to the remotest antiquity. The most memorable is that of Arria and Pœtus. The latter was condemned to suffer death for having conspired against Claudius. Arria his wife, not wishing to survive her husband, plunges a poniard into her breast. She withdraws it, and presents it to her husband, saying: *take it, Pœtus, it gives no pain.* Their daughter was desirous of imitating her mother, under similar circumstances. She opens the veins, but her husband who was condemned to punishment, entreats her, and obtains her consent to survive him for the sake of their children.

Richard Smith, in 1726, presented a strange spectacle to the world. He had been rich, but was now poor and infirm. He had a wife and an infant child, with whom he could share nothing but misery. Richard Smith and Bridget Smith, by common consent, after having tenderly embraced and given a last kiss to their child, and slain it, hung themselves from the posts of their bed. A letter was found written by their own hand: "*We believe that God will pardon us. We have resigned our life because we were miserable, and without resources. We have also rendered to our only son the service of slaying him, for fear that he might become as wretched as ourselves.*" It is remarkable that these mad people, who had destroyed their only child, should write to a friend, to commend to his care their dog and cat!

In 1770, a young citizen of Lyons, handsome, having a fine figure, amiable, and possessed of superior talents, becomes enamored of a young lady, whose parents are unwilling to betroth to him. Her lover ruptures a blood vessel in making some undue effort; the physicians declare that no hope of recovery remains, and his mistress provides him a temporary abode. She is armed with two pistols and as many poniards. They embrace for the last time,—the triggers of the two pistols are attached to ribbons. The lover holds that which is to kill his mistress, while the latter holds the ribbon of the pistol which is to take the life of her lover. Both pull at a given signal, and both fall at the same instant. This example having become but too celebrated, has had, unhappily, many imitators.

Some years since, the son of a justice of the peace, employed in one of the bureaux of the Legion of Honor, became attached to a young lady, the daughter of a wealthy merchant. The parents of the latter refuse their consent to the marriage, on account of the youth of the suitor. They repair to the forest of St. Germain; where the lover, having blown out the brains of his mistress who had not the courage to destroy herself, suspends himself from a tree by the shawl of her who had just consented to die for him, and by his hand.

Madame de Staël, who, during the excitement of youth, seemed to approve of suicide, condemned it at a later period, and reproached herself for this error. In an essay, or fragment on suicide, which this celebrated woman attributes to the *pain of living*, we read the following example: In 1811, M. and Mad'e left their residence and went to the inn at Postdam. After having sung pieces suited to the occasion, M. blew out the brains of Mad'e, and destroyed himself immediately after. The lady had a father, husband, and one daughter; while the gentleman was an esteemed scholar and a distinguished officer.

A disposition to suicide is sometimes feigned; or, to speak more correctly, there are individuals who threaten to take their own lives, without the least intention to do so. We sometimes notice this in society, among a class of people whose imperious desires lead them to utter all sorts of menaces, in order to overcome the resistance which is opposed to their wishes. The insane, and more particularly monomaniacs, animated by various motives; now, to obtain what they desire; now, to afflict their friends; and now, from ca-

price; pretend to desire to commit self-murder. They are however, very careful to be seen, so that some one may come to their rescue; or so well arrange matters, as to suffer no harm in their attempt.

A lady twenty-seven years of age, among a thousand extravagances, which had for their object to afflict and grievously alarm her husband who loved her much, made several feigned attempts to commit suicide. After some months she was committed to my care. She wore the dress of a man, the only clothing that for six months she had been willing to put on. After she had retired to bed, the male attire which she wore was removed, and the dress of a female substituted for it. On the following morning, she begs for the dress she has been accustomed to wear, which was refused her. She then springs from her bed, threatens the persons who serve her, howls, rolls upon, and strikes her head against the floor of her chamber. I hasten in the direction from which the noise proceeds. On seeing me, she strikes her head rudely, repeating; "*I want to kill myself.*" Very well, kill yourself; this must be a bad head, at least, and your husband will be relieved from a great source of annoyance. As it respects myself, it is a matter of the most perfect indifference. Scarcely had I pronounced these words in a threatening tone, when she rises, and dresses herself; and, since that time, though she may have remained as it respects her reason, an insane person, she has not once threatened to destroy herself.

A young woman was constantly speaking of destroying herself, and made a thousand attempts without accomplishing her pretended purpose. An old uncle with whom she lived, wearied by her oft-repeated threats, proposed to her a walk into the country, and conducts her to the border of a pond, and pretends that he is about to undress himself. "Come, my niece," said he to her, "throw yourself into the water, I will follow you. Your hatred of life is so great, that you had better bring it to a close." He presses, and urges her even. After a long struggle, she declares that she does not wish to drown herself, and that she will talk no more about self-murder. She kept her word. This uncle, at the age of seventy-seven years, became a maniac, and died of apoplexy.

Finally, a case of supposed suicide may become the subject of grave questions in legal medicine. Murderers, in order to conceal their crime, have endeavored to make it appear that their victims had committed suicide. The student of legal medicine ought to be acquainted with the signs which distinguish the dead body of a suicide from that of a man who has been assassinated. Louis has written on this subject. We read in his essay, that a son, having robbed his father of a sum of money, strangled him, and afterwards suspended the corpse with the same halter that he had employed to commit the parricide. Such are the diverse circumstances which precede, determine and signalize, all those acts by which man takes his own life, whether voluntarily or involuntarily. They prove how faulty are all the reports that have been published respecting suicide, even those which have been drawn up from the verbal processes, deposited in the registers of the public authority. These reports are of little service in elucidating the history of the suicide; because they in general are wanting in those statements that are necessary to establish the true cause of it, and the motive which led to the suicide; because they rarely notice the physical and moral state of individuals who have destroyed themselves; because they do not ascertain whether a man, who is found dead, was insane, or whether he fell a victim to a sudden impulse of despair, or by a reflected resolution; and because, finally, it is not known but the subject of the report may be the victim of an assassin. These suggestions may give a right direction, if I am not mistaken, to the enquiries of a physician who may be required to make a judicial report, with respect to the dead

body of a man who is said to have committed self-murder. In fine, they may be useful to the physician who is charged with the direction of an establishment for the insane.

What precedes, will justify the remark which was made at the commencement of this article, to wit: that self-murder is only a phenomenon, consecutive to very different causes; that it cannot be regarded as a malady *sui generis;* and that it is, almost invariably, a symptom of mental alienation. The greater part of those unfortunate beings who have made attempts upon their own lives, or who have committed suicide, belong to families, some of whose members have been affected with mental alienation. Most of those who have failed in accomplishing their designs, remain insane for a longer or shorter period of time, or become so afterwards. A large proportion of them have manifested, before committing the fatal deed, all the symptoms of lypemania. Some have destroyed themselves, after having had an attack of mania, subsequently to which they have remained sad and morose.

CLIMATES, SEASONS, AGES AND SEX, CONSIDERED AS CAUSES OF SUICIDE.

Climate, it is constantly remarked, exercises a remarkable influence in the production of suicide; in proof of which, its frequency in England is noticed; caused, it is supposed, by an atmosphere surcharged with humidity, and by fogs. But have they reflected upon the fact, that suicide was unknown in Great Britain at the time of its conquest by the Romans, whilst it was, at that epoch, frequent in Italy? Climates have remained the same; but morals, civilization and opinions, have changed; and these are the causes which powerfully affect the frequency of mental maladies. Do not the Dutch live in a climate still more humid, and as foggy as that of England? Notwithstanding, suicide is less frequent in Holland than elsewhere. The climate of Copenhagen has not changed; yet suicides have progressively doubled within forty years. At Berlin, the suicides within a century have augmented in a deplorable proportion. Are not suicides more frequent during certain years and seasons, in the same country and city, though the climate has not changed? In the spring of 1811, there were many suicides in Paris. Dr. Rech* of Montpellier, has written me, that during the year 1820 more suicides occurred in that city than in the preceding twenty years. I am not disposed to deny, that a cloudy and sombre sky disposes to sad and melancholy thoughts, and may, with propriety, be ranked among the causes which give rise to suicide. But I believe that the authority of Montesquieu has given to it undue importance, and that his assertion has been repeated without sufficient consideration. It has also been frequently said, that suicide was more frequent in autumn than at any other season. Cheyne, in England, adopts this opinion, and Professor Osiander participates in it, with respect to the north of Germany. Have they not been led to entertain this opinion through the influence of the humoral theories, or in consequence of the analogy of autumn with brumal climates? The physicians of Vienna are of opinion that suicide is most frequent, before and after the equinoxes. Fodéré and M. Duglas observed at Marseilles, that suicides were most frequent when the thermometer rose to twenty-two degrees (Reaumur). During the month of August, 1822, Dupuytren remarked at his clinic, that within two months, the suicides brought to the Hôtel-Dieu were much more numerous than during the preceding years. The summer was extremely warm.

* Since that period, Dr. Rech, Professor of the Faculty of Montpellier, and having charge of the hospital for the insane, has issued several very interesting publications, respecting the establishment of which he is physician, and upon mental diseases.

In a report of those admitted during a period of six years, into the division of the insane at the Salpêtrière, after having attempted to commit suicide, I find that these attempts were most frequent during the warmest seasons and in spring; and least so, during the three months of autumn. Does not mental alienation make its irruption more frequently in summer than at other seasons? Witness the following statement:

During the three	months	succeeding	December,	42	were admitted.
"	"	"	March,	58	"
"	"	"	June,	61	"
"	"	"	September,	31	"

Cabanis observed, that after a very dry summer, succeeded by a rainy autumn, that suicides were most frequent during the latter season. I made the same observation in 1818. We received during that year into our hospital, a much greater number of suicides than we had received in previous years, or have since admitted. In my private practice also, I had at the same period a greater number of suicides to treat. Is not the transition from a dry summer to a humid autumn, especially favorable to the development of abdominal affections, upon which suicide so often depends? We do not charge external causes alone with producing suicide. There are certainly individual predispositions, a certain physical state, which modifies, exalts or enfeebles the sensibility.

The difference in the mood of mind, causes one man to laugh at the most afflictive events, while another is excessively agitated, or filled with despair. The latter destroys himself; while the former becomes insane. Is not this predisposition rendered evident by the hereditary nature of suicide? We have known entire families destroy themselves, just as we have known whole families become insane. Voltaire states, that a man of a grave profession, of mature age, and of regular habits, committed suicide Oct. 17th, 1769, and left to the council of the city where he was born, a written defence of his death. His father and brother had destroyed themselves, at the same age with himself. Is there not a certain disease which develops itself at the same age, in all the members of a family? A man, whose father and grand-father had taken their own lives at the age of fifty-three years, began at the age of fifty to be tempted to suicide, and was persuaded that he should die as his relatives had done. We have at the Salpêtrière a woman aged sixty-three years, who has had a great number of attacks of suicidal lypemania. Her daughter has had several attacks of mania; and her grand-daughter, from the age of fifteen years, was subject to the same attacks, and entertained thoughts of suicide.

Rush relates the following case.* Captains C. L. and J. L. were twins, and so nearly resembled each other that it was impossible to distinguish them. They served in the war of American independence. They were equally remarkable, and both attained the same military rank. They were gay in their dispositions, and happy in their family alliances and fortune. Capt. C. L. resided at Greenfield, two hundred miles from the house of his brother, who had removed to Vermont some years before. Captain J. L., when returning from the General Assembly of Vermont, shot himself with a pistol. He had been sad and taciturn for some days previous. About the same time, Capt. C. L. became melancholic, and spoke of suicide. Some days afterwards, he rises very early in the morning, and proposes to his wife a ride on horseback. He shaves; after which, he passes into an adjoining chamber and cuts his throat. The mother of these two brothers, adds Rush, is insane, and two of the sisters have been, for several years, harassed with the thought of self-murder.

* *Medical Enquiries and Observations upon Diseases of the Mind.* Philadelphia, 1812, in 8vo, page 47.

G., a proprietary, leaves seven children, with a fortune of two millions. They reside at Paris or its environs, and preserve their respective portions of the paternal estate. Some increase theirs; while no one experiences any serious misfortune. All enjoy excellent health, lead honorable lives, and are held in high and general estimation. The entire seven brothers, when between the ages of thirty and forty years, commit suicide.* Gall, who relates this fact, knew a family, the grand-mother of which, a sister, and the mother, committed suicide. The daughter of the latter was on the point of hanging herself, and the son effected his death by this means.

We have at the Salpêtrière many insane persons, whose fathers, mothers, brothers or sisters, have committed suicide. A rich merchant, of a violent disposition, is the father of six children. As they complete their education, he gives each of them a large sum of money, and sends them away from home. The youngest, aged twenty-six or seven years, becomes melancholic, and precipitates himself from the roof of his house. A second brother, who had charge of him, reproaches himself on account of his brother's death, makes several attempts to commit suicide, and dies a year afterwards, in consequence of prolonged, and repeated abstinence. During the following year, another brother has an attack of mania, of which he is cured. A fourth brother, a physician, who two years before, had told me, with looks indicative of despair, that he should not escape his destiny, destroys himself. Two or three years later, a sister becomes at first a maniac, and afterwards makes numerous attempts upon her life. The sixth brother is at the head of a great commercial establishment, and would have terminated his existence as his brothers had done, had not his life been preserved, through the influence of his children and wife, who was to him a guardian angel, both by her care and tenderness.†

Suicide is most frequent between the ages of twenty and thirty years. This is demonstrated by the report, founded on the admissions of women at the Salpêtrière, before, or after having made attempts to commit this act.

Before the age of	15 years,	2
From 15 to 20	"	16
" 20 to 25	"	29
" 25 to 30	"	27
" 30 to 35	"	27
" 35 to 40	"	27
" 40 to 45	"	25
" 45 to 50	"	22
" 50 to 55	"	7
" 55 to 60	"	6
" 60 to 65	"	7
" 65 to 70	"	1
" 70 to 75	"	2
		198

This makes the number 198, (out of 1898 admissions), of insane women, received during six years at the hospital of the Salpêtrière, who had made attempts to commit suicide. It is a little more than one tenth.

Although suicide manifests itself as a form of mental alienation, only after the age of puberty, we have seen nevertheless, in our days, school-children terminating their existence, the victims of a vicious education, which teaches that a state of nothingness lies beyond the limits of this life, and that it is lawful for a man to deprive himself of his existence, whenever it becomes

*F. G. Gall, on the Functions of the Brain. Paris, 1825, 6 vol. in 8vo.

† Some years after I first wrote these lines, this wretched being destroyed himself.

disagreeable to him. We had at the Salpêtrière a female, who threw herself into the river at the age of nine years, and repeated the act at the age of forty.

Old age, which inspires man with the desire of living, because his life is, at this period, of necessity so short, is rarely exposed to suicide. However, in ancient times, when the stoic philosophers felt themselves growing old, or sinking into the infirmities of advanced age, they avoided, by a voluntary death, *the shame*, or the infirmities of caducity. We still meet with some old men who, less desirous of life than the generality of mankind, destroy themselves, or rather, permit themselves to die.

A physician of Paris, eighty-four years of age, experiences a slight indisposition, from which he is promptly relieved. Some months afterwards, he finds himself again sick. Nothing can induce him, either to take care of his health, or make use of the least nourishment. By following your advice, he was accustomed to say to his friends, and only daughter, I can prolong my days a little, but I must of necessity soon die. After an abstinence of five days' continuance, he consents to take the yolk of an egg, and a few moments after expires. His daughter becomes insane at the age of thirty years. Pomponius Atticus being sick, subjected himself to the most rigid abstinence. His pains cease, but he refuses all aliments. He permits himself to pine away, saying, that in this way he was prepared to die easily. The father of the celebrated Barthez allowed himself to die of hunger at the age of ninety years, in despair at the loss of his second wife.

Although women may be more exposed to mental diseases than men, suicide is, nevertheless, less frequent among them. Observers in all countries are agreed on this point. The exaltation of their sensibility; the transports of their imagination; the exaggeration of their tenderness and their religious affections, produce maladies opposed to suicide, from which they are in a still farther degree removed, by the gentleness of their disposition, and their natural timidity. They suffer from the vapors and other nervous diseases, and become insane. They take their own lives, as has been remarked, less frequently than men, and it is usually love, or lypemania, that urges them to the commission of this act. Hippocrates remarks, that girls who have never menstruated, and young women with whom this function is performed imperfectly, fall into a state of prostration, and commit suicide. Brorson, who has written a treatise on suicide, establishes the proportion of men to women, as five to one. According to a report made at the March of Brandebourg, it appears that there are forty-five suicides per annum; to wit, thirty-two men and thirteen women. A report made at Paris during the years 1805–6 and '7, gives two hundred and eighty-two men, and one hundred and thirteen women. A later report, shows that there were during the first three months of the year 1817, thirty-nine suicides of men, and ten of women, besides twenty-five persons whose sex was not ascertained. In my own establishment, there have been admitted fifty persons who had made attempts to commit suicide; thirty-five men and fifteen women. From these and many other reports, we may conclude that the proportion of suicides among men and women, is as three of the former, to one of the latter.

[From a list of suicides made up from data furnished in the United States, during the year 1843–4, it was found that of one hundred and eighty-four suicides committed, one hundred and fifty-four were men; the remaining thirty, women.]

But these conclusions are subject to accidental exceptions. In fact, authors speak of epidemics of suicide, which have been confined to women. The character of these epidemics confirms what we have said; that suicide is only a consecutive symptom. The appearance of an epidemic form of suicide is most singular. Does it depend upon a latent condition of the atmos-

phere; upon imitation, so powerful in its influence over the determinations of men; upon those circumstances which produce a revolution, in a country; in fine, upon any governing sentiment? It is certain, that these sudden and temporary epidemics are the effect of different causes, and confirms what we have already said;—that suicide is not a malady *sui generis*. The philosopher Hegesias, an admirer of stoicism, preaches in Egypt, during the reign of Ptolemy, contempt of life and the pleasures of death. Suicides soon become very frequent. Plutarch tells us, that suicide prevailed as an epidemic at Miletus, and that young women and girls hung themselves, in emulation of one another, because war kept the other sex abroad. Primerose assures us, that in his time, the women of Lyons, disgusted with life, precipitated themselves in crowds into the Rhone, without assigning any cause for so doing. An ancient historian of Marseilles says, that the girls of that city were accustomed to destroy themselves, in consequence of the inconstancy of their lovers. Sydenham tells us, that in 1697, there were many monomaniacs and suicides in the city of Mansfeld during the month of June, which was extremely warm. The same thing, we just remarked, was observed at Stuttgard, during the summer of 1811. In 1806, there were a great many suicides at Rouen. Atmospheric heat, in connection with reverses of fortune, seemed to be the cause of it. Doctor Desloges, physician at St. Maurice in the Valais, witnessed an epidemic of suicide in 1813, in the village of St. Pierre Montjeau.

A woman hung herself, and other women felt themselves impelled to follow her example. Some years since, in the environs of Etampes, a priest hung himself, and in a few days after it two others in the environs also destroyed themselves, and some other persons imitated them. I have heard this case related by Pinel, whose estate was in the neighborhood of Etampes. When nostalgia prevails epidemically in an army; when mountaineers take up their abode in our cities; when monomania is rife among a population, particularly superstitious monomania; then are suicides most frequent.

Education, the reading of works that extol suicide, the power of imitation, contempt for religious opinions, the excesses of civilization, a military spirit, political revolutions, the depravation of morals, gaming, onanism, the abuse of fermented liquors, physical pain, pelagra, are also causes that lead man to commit suicide. If by education, the mind of man is not fortified by a religious belief, by moral precepts, by habits of order, and a regular course of life; if he is not taught to respect the laws, to fulfil his duties towards society, and to support the vicissitudes of life; if he has learned to despise his equals, to treat with disdain the authors of his being, and to be imperious and capricious in his desires; then unquestionably, cæteris paribus, he will be most disposed to terminate his existence by a voluntary act, so soon as he shall experience any serious vexations or reverses. Man needs a controlling authority, which shall direct his passions and govern his acts. Given over to the guidance of his own native weakness, he falls into indifference, and from that into scepticism. Nothing now sustains his courage. He meets unarmed, the conflicts of life, the anguish of the heart, the vicissitudes of fortune, and the wayward impulses of the passions. A student, educated in religious principles, becomes melancholic, and finally speaks of death. He often enquires of one of his companions if man has a soul. The latter replies that he has not. After a painful struggle between the principles of his childhood and the errors of youth, this unfortunate young man terminates his career by suicide. A young man, before destroying himself, in a writing which he leaves, censures his parents for the education they have given him. Another utters blasphemies against God and imprecations upon society. A third, destroys himself because he has not air enough to breathe at his ease. Two students, at the age of twenty-one, asphyxiate themselves, because a play which they had prepared together, did not succeed. A child, thirteen years old, hangs himself,

and leaves a note which begins thus: *I bequeath my soul to Rousseau, my body to the earth!!* When a great intellectual and moral change is brought about in society, it influences the progress of thought, and the conditions of existence.

Recklessness of mind reveals itself not only in useless writings and romances, but also in productions of a more elevated character. When the theatre presents only the triumphs of crime, and the misfortunes of virtue; when books, placed by their cheapness within the reach of all, contain only declarations in opposition to creeds, family ties, and the duties which all owe to society; they inspire a contempt for life, and suicides multiply. Death is regarded as a safe asylum against physical pains and moral sufferings. The reading of books which extol suicide is so fatal, that Madame de Staël assures us, that the reading of the *Werther* of Goëthe has produced more suicides in Germany, than all the women of that country. Suicide has become more frequent in England, since the apology that has been made for it by the Downes, Blounts, Gildons, etc. The same is true of it in France, since they began to write in favor of self-murder, and have held it up before the public as an act of our free will and courage. The suicide of Richard Smith and his wife; that of Philip Mordant, who destroyed himself, saying that when one is dissatisfied with his house, he should leave it; were the signal for a great number of suicides in England.

What precedes, establishes the fact that there are epochs in society, more favorable than others to suicide, in consequence of the general exaltation of mind. The more excited the brain is, and the more active the susceptibility, the more do the wants augment; the more imperious become the desires; the more do the causes of chagrin multiply; and the more frequent become mental alienation and suicide. Any person may satisfy himself of this, by comparing the number of suicides in cities, particularly capital cities, with those that take place in the country. The same fact will appear by comparing the number of suicides in Russia with those that occur in France, and particularly England. If one now compares the actual state of Europe with that of Italy, during the time of the emperors, will he be astonished that epochs so similar, as it respects morals and the splendor of civilization, are equally fruitful in suicides? During the ninth and tenth centuries, the epoch of confusion in opinions and doctrines, the *donatists*, seized with a suicidal frenzy, devoted themselves to death, or gave themselves up to it for money. Men, women and children hung themselves, or threw themselves from precipices, or upon funeral piles. The *gnostics* permitted themselves to die of hunger, through fear of wounding a creature which was a part of the Deity.

A military spirit, which inspires indifference to life, which attaches little importance to a good which one is ready to sacrifice to the ambition of a master, is favorable to suicide. At Rome, during their civil wars, the conquered generals destroyed themselves, that they might not fall beneath the yoke of the victor. The vessel which carried Vitellius and his cohort, was taken by the fleet of Pompey, among the sands of the Illyrian sea. After having fought valiantly, fatigued with the carnage, Vitellius exhorted his surviving soldiers to prevent, by a death of their own choosing, the disgrace of falling into the hands of the victors. Animated by his discourse, his soldiers slew each other upon the deck.

Great calamities also lead to suicide. It prevailed extensively during the existence of the black plague that ravaged Europe, towards the middle of the fourteenth century. Historians assure us that the Peruvians and Mexicans, in despair at the destruction of their worship, usages and laws, destroyed themselves in great numbers; and that more fell by their own hands than by the fire and sword of their barbarous conquerors. Ross Cox, in his account of a voyage in the waters of Columbia, published in London in the year 1831,

relates, that at the close of the last century the small pox committed horrible ravages in India, and that thousands of Indians hung themselves to trees, believing that the *Great Spirit* had delivered them over, to be punished by evil ones. Montaigne states, that during the wars of the Milanese, this people, impatient of so many changes of fortune, *so fully determined to die, that I have heard it stated to my father that they had taken an account of at least twenty-five heads of families, who destroyed themselves in a single week.*

In 1320, five hundred Jews, pursued by the peasantry of the country, took refuge in the château of Verdun, upon the Garonne. Besieged by their implacable enemies, and driven to despair, after having thrown their infants over the walls to their besiegers, they cut their own throats. The Jews, at the time of the siege and taking of Jerusalem by Titus, in order to put an end to their sufferings, threw themselves from the top of the ramparts, or set fire to their houses, in order to become a prey to the flames.

Onanism is referred to by Tissot, as one of the causes of suicide. I have very often seen suicide preceded by the practice of masturbation. The same is true with respect to the abuse of alcoholic drinks. These two causes exhaust the sensibility, producing languor or despair. They produce also much insanity. Individuals thus enfeebled sink into lypemania, and form no other purpose than that of ridding themselves of life, which they have no longer the capacity to endure. We have had at the Salpêtrière two sisters, who were prostitutes; one of whom drowned herself after a revel. The other, twice threw herself into the Seine while intoxicated, and made a third attempt, when she was rescued and brought to the hospital. We had one woman, thirty years of age, who, whenever she met with any vexation, sought to drown her troubles in wine; and when intoxicated, made a thousand attempts upon her life. Another woman of the town, whenever she is overcome by wine, endeavors to hang or strangle herself. When asked what impels her to such attempts, she replies vaguely, that she does not know, and is not conscious of what she does. M. Dannecy had occasion to notice, at the Hôtel-Dieu, a shoemaker, who had the same inclination for drink, and the same impulse to suicide whenever he was intoxicated. An advocate of Paris, unable to prevent the excesses to which intoxication led him, was so overcome with despair on account of it, that he opened the veins of both arms, and died in the month of December, 1810.

The pelagra produces a great number of suicides, particularly in Lombardy; and Professor Thomassini has assured me that one third at least of the pelagrous destroy themselves. Since the first publication of this article, in 1821, I have seen this disease in Upper Italy, and particularly in Lombardy. The pelagra is primitively a disease of the digestive apparatus, which is complicated secondarily, with a cerebral and cutaneous affection. Frapolli recognizes in it three stages; in the first, little beside gastric symptoms appear. The skin of the extremities of the limbs however, becomes discolored and detaches itself in scales. During the second stage, the cerebral symptoms appear, and the skin becomes rugose, thick and cleft. There is acute delirium and insanity in all its varieties, particularly suicidal lypemania. Some Italian writers think that one third of the pelagrous destroy themselves. Others, estimate this number as high as one half.* Among a great number of lypemaniacs, we observe in France, an analogous phenomenon; these patients experiencing, without doubt, an irritation of the skin at the extremities of the fingers, which they tear and lacerate with the nails. This symptom diminishes and disappears when lypemania tends to a cure, or when it has ceased entirely.

I will not enlarge more upon the causes of suicide, but will confine myself

* On the Pelagrous Form of Insanity, by Doctor Brierre de Boismont, 1834.

to the indication of those, which seem to produce it most frequently. If I have not spoken of the passions which often occasion suicide, either acute or chronic, it is because I have noticed them sufficiently, while analyzing the circumstances which almost invariably precede it. The phenomena which accompany or succeed the disposition to suicide, offer the most striking analogy to those of mental maladies. We say in general, that persons of a melancholic temperament and a bilious constitution, are very prone to suicide. They have a sallow complexion, and the features of the countenance are shrunken. They suffer also from abdominal constrictions and embarrassments. We see individuals however, endowed with a sanguine temperament, and offering all the signs of plethora, who terminate their own existence. This plethora is particularly manifest among women, who usually destroy themselves, or attempt to do so, during the menstrual period. Those who are known to suffer from suicidal impulses, should be carefully watched at these seasons. A scrofulous habit is also very often met with in persons who have been driven to commit suicide. It disposes to discouragement, apathy, indifference, and consequently, to ennui. As it respects the moral character of the suicidal, from which an effort has been made, to deduce something ennobling in the act of self-murder, there is nothing constant. Courage is manifested, it is said, in committing suicide. But poltroons and warriors, women and men, master and slave, rich and poor, the criminal and honest man, all destroy themselves; offering no other differences, than those which spring from causes foreign to the character of each.

It would be exceedingly difficult to describe the acute form of suicide, since it is executed so soon as resolved upon, and as the greater part of the phenomena which accompany and succeed it, are observed only in its chronic form. I shall confine myself to a description of the latter. At the commencement of this affection, those who entertain a purpose to destroy themselves, or who feel inclined to suicide, experience many symptoms of hypochondria or melancholy. They complain of dyspepsia, of disturbance in the abdominal viscera, of flatulence and constipation. Their complexion changes. Sad, thoughtful and reserved, they become emaciated or œdematous. These wretched beings experience pains in the bowels, bloatings and heats which distend the intestines, and provoke cephalalgia. They suffer also, from throbbings within the cranium, constrictions at the root of the nose, and spasms at the epigastrium, together with a general uneasiness, more trying than severe local pain. They renounce their former habits, and no longer have a taste for any thing; since the world, at length disenchanted, no longer possesses either beauty or interest. They behold things readily enough, but no longer feel as they were formerly accustomed to do, with reference to them. They express a desire to die, and speak with approbation of those who have put an end to their own existence. They speak of death with earnestness, or an affected indifference, and complain of not enjoying favorable opportunities for the accomplishment of their purposes. Soon, they imagine that they are neglected and despised,—fly the world, seek solitude, become pusillanimous, suspicious, and scarcely persuade themselves to live. At length, the idea of destroying themselves becomes fixed, and constantly engages their thoughts, from which they cannot divert their minds. Their thoughts are concentrated upon this subject, with all the obstinacy that is noticed among other monomaniacs. If the fatigue of watching causes them to sleep, they are troubled with frightful dreams. Thus, neither night nor day, can these unfortunate beings shake off the thought of death; no more than other monomaniacs the idea that they are ruined, disgraced or condemned.

There is not an individual belonging to this class, who has not ideas of suicide, and a desire even, to precipitate himself therefrom, whenever he finds himself upon an elevation, or near a window; or of drowning himself when

passing over a bridge. These, like all possible ideas, which are constantly renewed, and succeed each other by crowds in the mind, are represented in turn. They usually leave no traces in the mind, more than other thoughts. But if a man actually experiences a violent vexation; if the idea of self-destruction presents itself, in connection with a thousand other thoughts, to his mind; this one thought of suicide associates itself strongly to the moral state which is present together with the vexation, and the desire of freeing himself from it. Hence arises the determination to self-murder, as an infallible means of terminating his misfortunes. The impulse to suicide is more or less violent and sudden, and depends upon numerous causes; upon the age, sex, temperament, habits, profession and irritability of the individual, and a thousand other circumstances that escape our observation. Does not this obstinate association of ideas occur fortuitously in a state of health, while we are engrossed with a given subject? It is durable, in proportion as the false ideas are associated together, in a manner calculated to absorb the understanding, and to concentrate the attention and sensibility. These ideas, closely connected, and varying with individual cases, lead men to form erroneous judgments; and to determinations, sometimes sudden, and sometimes long reflected, in connection with the prejudices and exclusive reasonings which characterize monomania.

A nobleman calls upon M. Anson his friend, and says to him, I am tired of the insipidity of life, and my intention is, to quit it to-morrow. After a long conversation, M. Anson being obliged to be absent, obtains the promise of this nobleman to await his return, which is fixed at four o'clock precisely, some days afterwards. M. A. was unable to arrive on the day appointed, before the hour of five. His friend had shot himself at four.

But it is said, that suicides obey irresistible impulses. I have questioned several hypochondriacs, and a great many lypemaniacs, who had made attempts upon their lives, on this point. All assured me that the attempt at self-destruction was voluntary, and that they dwelt upon the thought of it, even with satisfaction. But all added, that they were in a state, either physical or moral, than which nothing could be more dreadful; that they believed its continuance must be eternal; and that death presented itself to them as the only mode of deliverance from it. It was this circumstance which rendered it desirable. Those who experience no farther pleasure from life, and yield to the spleen, have no longer sensations or desires. They have exhausted the resources of life. They experience a frightful void, and are in a state of complete isolation from the world. This produces a state to which they prefer death, which has no terrors for them: the transient pain of dying, appearing preferable to a never-ending ennui. Much is said about persons who destroy themselves without effort or repugnance. No notice however, is taken of those who destroy themselves after painful and unknown sufferings. I have heard it remarked by a woman who, after having thrown herself into the Seine, was brought to the Salpêtrière, that before effecting her fatal purpose, she had walked for twenty-four hours, at a rapid pace, upon the bank of the river, and that during this whole period her sufferings were indescribable. We have also at the Salpêtrière another woman, who threw herself into the river. Since this accident, she has been melancholic, and suffers much when bathed, or when she passes near a river. They cause her to do whatever they desire, by threatening to throw her into the water.

A maiden learns that her lover is drowned. She rises very early in the morning and goes to the banks of the Seine to drown herself. She sits down upon the brink of the water, and delays until the next day, the execution of her design. On the following day, the same resolution calls her back to the same place. The horror of death causes her to return to the house of her parents. On the third day, constantly beset by this idea, she was upon the

bank of the river deliberating, when some one, passing along on the foot-path, perceived her. He calls to her, and threatens to go for the guard. This threat causes her to lose her reason, and she at once plunges into the river. She is immediately taken out of the water. Her menses were flowing at the time, and were suppressed. She has since been epileptic.

What misgivings characterize the conduct of those who meditate suicide! What conflicts before determining upon it! What efforts to reconcile themselves to it, hidden and concealed from the public, to secure to this senseless act, the external aspect of courage and fortitude! It is self-love still, that invests suicide with its mantle. How many self-murderers would yet live, were some friend able to unite again the thread of life which they have severed! How many are there, who regret, in quitting life, the destiny which they found too unhappy! With what avidity do they seize again upon life, by every means that are offered them! A man throws himself into a well. He makes every effort to get out of it, and points out the means of effecting this purpose. Pauline, the wife of Seneca, both young and beautiful, wished to die with her husband. She opens certain blood vessels. Nero, on being informed of this act, orders the bleeding wounds to be stanched. Snatched from the portals of the tomb, she thinks no more of death. The struggles of suicides, against the desire which leads them to the commission of self-murder, are either exceedingly painful, or they contemplate their destruction with a kind of joy. They have paroxysms, now regular, and now irregular; deferring the execution of their design, now, from one motive, and now from another. Often do they wear upon their persons, or conceal in a safe place, the instruments or means of destruction; uncertain with respect to the time, place or occasion, most favorable for the accomplishment of their purpose. We can also, with some experience, prevent the effects of these exasperations, which impress upon the physiognomy a sinister expression, in consequence of the return of the physical and moral symptoms, previously indicated. The physical symptoms are then most grave, the moral sufferings most intense, and life most insupportable.

Finally, after having engaged for months and years, in an internal struggle, with alternate remissions, a prey to the most frightful passions, or else indifferent and insensible to every thing; experiencing neither the blessings nor pain of living; led on slowly, to the last degree of physical and moral insensibility, which deprives man of the conservative instinct of his own proper existence; they quit life, to avoid intolerable sufferings, or a most trying weariness of it. Their eyes are haggard, the countenance is flushed, or very pale, the respiration is hurried, and the mind perplexed. They are no longer masters of their actions. The sentiments which some of them leave behind; do not these prove the exaltation and derangement of their reason? If some write to their relatives and friends, letters which express the composure of reason, do they not dissemble their moral condition, as so often happens in the case of monomaniacs?

This destruction of all physical sensibility is not rare among monomaniacs, as we have known them to mutilate and burn themselves, and amputate the limbs, without appearing to suffer any pain in consequence of it; so completely had the exaltation and fixedness of their emotions blunted their sensibility, and driven it from its true seat.

Many suicides, after having most seriously wounded themselves, do not complain of the pain of their wounds. This state of organic insensibility indicates that the delirium has not ceased, and that the patients ought to be watched with care. Porcia, filled with despair on account of the death of her husband, swallows burning coals. Haslam speaks of a woman who, having champed some glass in her mouth for a half-hour, assured him that it did not occasion the least suffering. I have applied blisters, setons, moxas and the actual cautery, to persons strongly inclined to suicide, and lypemaniacs, in

order to interrogate their sensibility, without producing pain. Some, after their restoration to health, have assured me that they did not suffer in the least from these applications. A young man, twenty-seven years of age, in a fit of maniacal despair, throws himself from the fourth story; protests that it has done him no harm, and ascends immediately to his apartment. The fibula was fractured. A soldier fractured one of his thighs, by throwing himself from the second story. He constantly repeated, it is nothing, I am not in pain. I do not insist upon this point of analogy between suicides and the insane. We shall see other examples of it, in the course of this article.

Among those who destroy themselves, there are some who choose neither the kind of death, nor the instrument, nor the means of their destruction, but employ whatever may offer; availing themselves of all the circumstances favorable to their design, so soon as their resolution is formed. This is especially true with respect to acute suicide, maniacs, those laboring under febrile diseases, and such as the delirium of the passions attacks. One permits himself to die of hunger; another watches his opportunity to throw himself from a height. One escapes to go and drown himself, while another hides and shuts himself up with the view of hanging himself. The pistol and poniard are also instruments which men employ. Women rarely have recourse to these means. They hang, drown, asphyxiate themselves, or die of hunger. Usually the instruments which these wretched beings employ, have reference to their professions; a circumstance which furnishes a proof of the spontaneity of their determination. Soldiers and sportsmen blow out their brains; shoemakers open the abdomen with a cutting knife; engravers with the graver; laundresses poison themselves with potassa, prussian blue, or asphyxiate themselves by means of carbon.

In the following report will be found the means by which 198 women attempted to end their days.

Suspension or strangulation,	49
Throwing themselves from a height,	45
Fire arms,	2
Cutting instruments,	18
Poison,	7
Asphyxia,	5
Abstinence,	48
Immersion,	31
	205*

In chronic suicide, in lypemania with a tendency to suicide, and in the spleen, patients sometimes choose the instrument which is to terminate their existence, and are unwilling to employ another, after having deliberated upon the different kinds of death, and having rejected them through various and often strange motives. However, there are cases in which they employ successively all those means which they regard as suited to accomplish their resolution.

It has been pretended that suicides preferred that kind of death which had the most intimate relation with their physical being. Experience daily proves this opinion to be false. It is rather the habit, profession or example, which determine the choice of the kind of death, and the means of destruction. There are persons who employ the utmost precaution against surviving the

* Seven women had recourse to two different modes of committing suicide; a circumstance which explains the difference of the sum total in the latter case, with the number of women who constituted the basis of our calculation.

attempts which they make upon their lives, in order to avoid the struggle against that horror which the earlier fatal convulsions may inspire. There are some also who, before throwing themselves into the river, fill their pockets with heavy bodies, and tie their hands or legs. Others, placing themselves so as to fall immediately into a river, shoot themselves with a pistol, or pierce their vitals with a poniard. Others still, confine themselves to their houses or apartment; or else remove every person, so as to render succor impossible.

[About two years since, a patient was brought to the Retreat at Hartford, Ct., who had repeatedly attempted suicide. One of his attempts was as follows. Being a farmer, he went to his barn, took a rope of considerable length, which was at hand, and threw one end of it over the "high beams," to which he made it fast. He then took a barrel, upon one end of which he placed himself, tied the rope snugly about his neck, and with the slack, fastened his hands behind him. As he was on the point of swinging off, a member of his family discovered him, and frustrated his fatal purpose. When admitted, his countenance was haggard, his eyes dull, and his frame emaciated. His countenance however did not indicate a great degree of mental suffering, nor was he disposed to refer to any subject of a painful character. He answered questions readily, intelligently, and in a tone of voice by no means desponding. Nothing indicative of mental alienation appeared at our first interview, nor indeed at any subsequent period. An attendant slept in the same bed with the patient, whose rest was for several nights much disturbed, as it had been previously for several weeks. He was closely watched for some time, and at length recovered. After his recovery an opportunity was taken to ascertain from his own lips, the condition of our patient's mind previous to his admission, as well as during the earlier period of his residence at the Hospital. To my surprise, I found that the period previous to his admission, during which the attempt just referred to was made, and also near one week after he came to the Retreat, *were a perfect blank*. He was an honest, respectable man, and his statement worthy of entire credence.]

A person throws himself into a river, from whence he is immediately withdrawn. Some days afterwards, he precipitates himself from the top of a steeple upon a pile of stones, fractures the body of one of the dorsal vertebræ, but does not die. He now resolves not to eat; but by great effort they surmount this resolution, which is still renewed from time to time. He dies a year after, from chronic inflammation of the mucous membrane of the alimentary canal.

Mad'e X., a cousin of the patient of whom I have just spoken, was endowed with the richest gifts of nature, and received an education every way suited to develop her naturally remarkable understanding, and exalt a brilliant imagination. The daughter of a wealthy banker, she married a nobleman of high rank. The revolution bore heavily upon her own and the family of her husband. Though very young, she was committed to prison, and did not recover her liberty until after the 9th Thermidor (July). Her nervous susceptibility acquires a remarkable degree of development; and the imagination becomes still more ardent. On entering the world again, she enjoys the society of men most distinguished for their attainments in the sciences, literature and the fine arts. Whatever was great, noble or generous, made a profound impression upon her mind. Some years after the restoration, which she hailed with enthusiasm, she permitted herself to be drawn away by an attachment, which was by no means happy. From that period, her family noticed a change of disposition. She became sad, solitary, and complained of nervous derangement. She traveled a long time without benefiting her health. She imagined that she carried in her system the virus of the plague, which would injure those that approached her, particularly the members of her fami-

ly, and isolated herself completely from the world; shutting herself up in a little apartment, into which a servant woman only was permitted, and that very rarely, to enter. She also was subsequently excluded, and the food, and other things which the wants of the patient required, were placed in an ante-chamber. This state persists for more than a year, and she becomes much emaciated, loses her sleep and appetite, the features of her countenance change, and the desire for death comes in, to aggravate this condition. Notwithstanding, menstruation was very regular, though she suffered from obstinate constipation. After some years, she persuades herself that she has enemies who desire to get possession of her person. She has hallucinations of hearing and of vision; and at length, suicide becomes a predominant idea. Being in the country, she throws herself into a river, from which they withdraw her. On the following day she refuses to eat, makes numerous efforts to strangle herself, and is brought to Paris. On the way, she endeavors by artifice as well as force, to throw herself from the carriage. After her arrival, she endeavors to strangle herself, refuses to eat, and for several months, swallows only from compulsion the liquid aliment which is introduced into her mouth. She seizes upon every variety of cord or band, for the purpose of strangling herself with it,—handkerchiefs, neck-cloths, garters, and the bandages which retain a cautery. She dashes her head against the walls and the corners of the chimneys; tries to throw herself from the windows, and the top of the furniture; and depresses the head to a level with the floor, while the feet remain upon the bed. She provides herself with small pieces of glass, to open the arteries, and endeavors to swallow feathers, crayons, and bits of wood. She makes, with little pieces of paper and wood, secretly taken from her mattress, balls to suffocate herself with, by swallowing them. She takes to pieces an article of furniture, in order to make the same use of the nails. One day, while walking in her garden, having on a camisole, and accompanied by a female companion and two servant women, she manages to conceal a pebble in her shoe, and desires to return to her apartment. They remove the camisole, when she immediately swallows the pebble, which was too large to pass the œsophagus without great difficulty. While efforts are making to urge it forward into the stomach, she rejoices, and when at length it has been forced into this organ, she consoles herself with the reflection that it will hasten the disorganization of the intestines.

One day whilst walking in the country, although followed by three persons, she throws herself upon the sword of a soldier. At another time, seeing two soldiers armed with muskets, she throws herself upon her knees and beseeches them to shoot her. The patient lodges on the basement floor, and her bed and chimney are wadded. They withdraw from her apartment whatever can awaken ideas of suicide, or serve for its execution;—such as scissors, pins and knives. Two women watch her during the day, and two during the night. She has a conviction that another revolution is at hand, and that not a single noble will escape it. With this exception, she enjoys her reason perfectly, in connection with a vigor of thought and soundness of judgment far superior to most women; but she is unwilling to see any one, not even her relatives. "I have a horror of myself, says she, and I am unwilling to be seen in this condition; besides, I should communicate the plague."

I employ baths, cold lotions to the head, purgatives, bark and musk. All the means suggested by experience, are in turn employed for several months with the greatest care. Following the method of Avenbrugger, I order a seton over the region of the liver, and cause her to drink several pints of fresh water daily, without producing any other effect than the abandonment of her attempts to commit suicide. Her disquietudes, fears and hallucinations are the same, and the desire of death persists. I close my treatment by confining myself to whey, tepid baths, sedative enemata, and to frequent conversa-

tions, which always divert the patient. At the age of forty-five years, anomalies of menstruation do not modify her health. Emaciation increases, and the feet, and sometimes the face are infiltrated. The patient always experiences the same repugnance to taking food. Some months subsequently, I invite her mother to pay her a visit. This first interview, after a long absence, makes a strong impression upon the patient, causes her to forget her disquietudes and fears, and to converse willingly. After a quarter of an hour however, she requests her mother to retire. The visits are repeated, and she experiences great pleasure in receiving successively, the other members of the family. I present her with crayons, pencils, knives, pen-knives, and every article of furniture necessary for her use. All the precautions that had been so imperiously necessary for eighteen months to prevent suicide, are now superfluous. She retires into the country, with her physical health much improved, though the œdema of the feet and face return from time to time. Her alimentary regimen continues to be bad. Nevertheless, she walks abroad, and engages in reading, drawing and painting. She also consents to receive a small number of persons into her family, excluding all strangers. Her menses cease without aggravating her disease, and she lives ten years after this period, always entertaining the same prepossessions and disquietudes, with the same unwillingness to receive society. Her toilet is peculiar, and made with little care; and her mode of nourishing herself consists in taking, with repugnance, meat or vegetable soups.

A magistrate, forty-five years of age, having many insane relatives, but regarded by the world as happy; being rich, the father of a family, and occupying a highly respectable situation, has been for several years harassed by the thought of self-murder. When about the age of forty-two years, while fortune seemed to be smiling upon him, he avails himself of the absence of his wife and children, who are in the country, to cut his throat in several places with a razor, but without causing death. He is heard to rush into his apartment, repeating these words: "How much it costs to die!" The neighbors hasten in, and find the wretched man extended upon the floor. He had died after stabbing himself several times with a knife, in the chest.

The obstinacy manifested in the resolution to commit suicide, and perseverance in the execution of this design, surpass all belief; especially among lypemaniacs. When this class of persons, controlled by a fixed idea, have resolved to terminate their existence, they resist, not merely the councils of reason, of friendship and tenderness, and those material obstacles that oppose their designs; but support unheard of sufferings, whilst preserving a composure and resignation which contrast singularly with the convulsive and painful expression of their countenance. In vain do they tell us that they do not suffer, whilst every thing betrays the keenest mental agony.

M. de B., having insane relatives, and a strong constitution, was tall, his hair and eyes black. His mind was well cultivated and his habits regular. Drafted at a *mass levying*, he was unwilling to serve, not in consequence of cowardice, but of his opposition to the revolution. He gave himself up to the practice of onanism, in order to make himself sick, and thereby obtain his discharge. Unfortunately, he succeeded but too well. His health was seriously impaired, and the vital forces weakened to such a degree, that he could scarcely walk, and lost his voice entirely. His emaciation is extreme, and he is believed to suffer from phthisis. Satisfied with being relieved from military service, he consents to take care of his health, which remains feeble, and extremely susceptible. Though naturally gay, he is often sad, and somewhat melancholic. An event of little importance produces lypemania. He conceives that his actions are watched, with a view to injure his family and friends. He refuses to leave his house, becomes morose and sad, and from time to time passes two, three and five days, without eating. After the dis-

ease had continued for several months, they discover that his reason for refusing food is, that by eating, he compromises the character of his family and friends: honor forbids that he should eat. The patient persists in this course for more than a year, when a physician orders two large bleedings from the foot. From the time that the frequency of his fasts began to increase, he conceived an aversion towards his friends. The more they exert themselves to arouse him from his disquietude, and to engage him to eat, the more irksome their presence becomes. At length he desires to be removed from his house. He is isolated, and committed to my care. Regarding himself in a house of safety, he once more eats, and recovers his strength; and although always uneasy, speaks and converses very agreeably upon every other subject, especially literature, which he has cultivated with success. Six months pass thus, and it is spring. The patient begins it, by prolonging his seasons of abstinence. He assures me that he is anxious to go as long as possible without food, so as to compromise no one. At other times, he affirms that he wishes to terminate his existence; his condition being intolerable. Douches, baths, enemata and frictions, produce no effect.

After three successive refusals to take food, he endures an abstinence of eight days' continuance. Frightened by this resolution, the thought occurred to me, that by introducing through the nares, into the fauces, a gum elastic tube, and injecting by this means some liquid aliment into his stomach, we should convince the patient that he could be forced to live, in spite of himself. M. Murat takes charge of this operation. It succeeds; but after taking his food for four days voluntarily and rationally, he renews his attempts. Eight days pass thus. They set in the chamber of the patient, although he touches it not, such food as he preferred when well. At this he becomes furious, pretending that we wish to tempt him to betray his honor. During the night he is sleepless; while he is walking, at a rapid pace, throughout the day. On the ninth day, we endeavor in vain to overcome his resolution, by producing acute pains with a flexible red hot iron, lightly applied to the skin. To this he manifests a stoical indifference. On the following day, his mother and family visit him, with the intention of remaining with him. Each makes his individual efforts to triumph over his resolution. They eat in his apartment, in order to incite him, by their example. One of his intimate friends, joins his own, to the efforts of the relatives of the patient.

An ecclesiastic, in whom he has much confidence, is not more successful. All is useless. On the twelfth day, he offers his arm to his mother, to walk with her in the garden. His limbs tremble, and he is very pale. After a quarter of an hour, he experiences a slight syncope. During this walk, we concert with his friend, a stratagem. When he has recovered from his syncope, we present to him a declaration, legalized by the seal of the state, and in appearance official, authorizing him to eat, and discharging him from all responsibility with respect to it. One of his friends, who was concerned in the stratagem, urges and encourages him; and as the patient still hesitated, his friend said to him; *Think you that I deceive you; that I would counterfeit the stamp of the state?* At the close of this sentence, which was spoken with earnestness, as if waking from a dream, *come mother*, exclaims the patient, *let us go up*, and he ascends two stories hastily. His friends cannot prevent him from devouring the half of a fowl contained in a pie, as well as half the crust of it. He also drinks freely of water, assuring us that his thirst has cost him more suffering than his long abstinence from food. Scarcely has he finished his repast, when symptoms of intoxication, carried even to delirium, appear. Three hours afterwards he retires to bed, complaining of cardialgia. Emollient enemata, and flannels wrung in hot water, applied over the abdomen, diminish his sufferings. The patient does not sleep. Never-

theless, on the morning following this painful night, he is comfortable. On the same evening he enters his apartment, and resumes his ordinary dress, complaining only of feebleness. One month after this, without any known cause, he shuts himself up in his apartment, strips himself naked, and declares that he will never open his door to any one, and will eat no more. The efforts of his mother and family are altogether useless. I go to the chamber of the patient, fearing lest the smallest noise in opening his door, would cause him to throw himself from the window.

Satisfied that a surprise would prevent this misfortune, I send for a strong lock-smith, who, with a large anvil hammer, with a single blow bursts open the door. The patient is struck with amazement, and permits himself to be dressed, but refuses to eat. *You have done well to surprise me*, said he, *otherwise I should have escaped through the window.* (This was in the third story). We tried music, of which the patient was very fond. For three days, the best musicians executed the choicest pieces of music near his apartment. On each occasion however, the patient becomes furious. He has since assured me that his fury resulted from his indignation that they should be amusing themselves, while he was in a situation so deplorable. On the fifth day of his renewed abstinence, M. Dubois introduced a tube through the nares, and conveyed into the stomach some broth with a little wine, assuring the patient, that unless he ate at evening, it would be renewed on the following morning. So much resistance does he experience in his attempt to introduce the instrument, that he dares not surmount it. The patient begins to laugh. *I had used*, said he to us, *all my efforts during the night, to contract the muscles of the pharynx, in order to prevent the introduction of the tube.* On the seventh day, every thing having failed, I resolve to roll up a handkerchief upon itself, and strike the patient with it upon the legs, saying in an ironical tone; since you make a child of yourself, we will treat you like a school-boy, so long as you refuse to eat. His pride is wounded by this treatment, and he asks to be permitted to eat. For four months since that period, he has eaten but twelve eggs prepared in water, without drink, and has been opposed to taking even this. He sits all this time upon a carpet, urinates very rarely, and goes to the water closet, not oftener than once in eight days. He does not allow himself to be shaved, wipes his nose and mouth with his fingers; and changes his linen only once a week. Although surrounded by his family, he is habitually sad; but converses with spirit, and sometimes gayety. I persuade the friends of the patient to commit him to the care of that friend, of whom I have spoken above, who had acquired a great ascendency over him, and who, by threatening to beat him, had induced him to take a long journey into Switzerland. After a year, the patient revisits Paris, and is no longer irrational. He remains however, whimsical and singular, and after some years his family are constrained to seclude him.

A woman of the town, reduced to extreme wretchedness, was the mother of a child eleven years of age, who lived with her. She commands this child to do whatever she shall order him, and not to leave the chamber before the following morning. This miserable woman locks herself up, removes all the coverings from her bed, lies down upon a matress, ties her feet together, and causes her child to bind her hands. She then requires him to cover her with her matresses, sheets and bed-coverings, and to place over these, all her wearing apparel and furniture, even to the flower pots. The child obeys. After the lapse of half an hour, he hears his mother sigh. He approaches the bed, and enquires if she wishes any thing. She replies with harshness; the child frightened, retires. After about an hour, he ceases to hear any thing, and remains until the next morning without going abroad, seated against the door, as his mother had commanded him. Not hearing his mother move, he re-

moves every thing that he has placed upon her, and finds her dead. In despair, this wretched child, no longer having a mother, goes to drown himself. He is taken out of the river, and relates what has just been stated.

I know nothing more deplorable than the following case, reported by Hufeland in his *Journal of Practical Medicine;* the No. for March 1819. A merchant, thirty-two years of age, having lost his fortune, and receiving no assistance from his relatives, determines to die of hunger. This wretched man was ill from six to seven weeks. While bearing a heavy burthen, he had met with a fall, and had, at the time, felt something give way in his bowels, near the umbilicus; since which, he had experienced constant pains in the abdomen. From the 12th to the 15th Sept. 1818, he wanders in the country, and stops in a lonely forest. On the 15th, he digs a trench, and there fixes the place of his death, and remains here until the third of October, the day on which he was found by an inn-keeper. After an abstinence of eighteen days, he still breathed, but was without consciousness; and expired not long after the inn-keeper had caused him to swallow, with great difficulty, a cup of broth, containing the yolk of an egg. They found upon the person of this unhappy man, a journal written in crayon, with his own hand. The following is an abstract of it:

"The generous philanthropist who shall discover me after my death, is requested to inter me, and retain, as a recompense for this service, my clothing, purse, knife and port-folio. I am not a suicide, but die of hunger, because wicked men have deprived me of a considerable fortune, and I am unwilling to be a charge to my friends. It is unnecessary to open my body, since, as I have just said, I die of hunger: Sept. 16th. Sept. 17th: What a night have I passed! I have been drenched with rain, and been very cold. 18th: The rain and cold have obliged me to walk about. Walking was painful to me. Thirst has compelled me to lick up the water which remained upon the mushrooms. But how unpleasant was this water! 19th: The cold, the length of the nights, and the thinness of my garments, which cause me the more keenly to feel the severity of the cold, occasion me much suffering. 20th: There is in my stomach a terrible commotion. Hunger, and especially thirst, become more and more dreadful. For three days it has not rained: would that I could lick water from the mushrooms! 21st: Not being able longer to endure my thirst, I crawl away slowly and with much difficulty, to buy a bottle of beer, which has not quenched my thirst. In the evening, I go for water to a pump, which is near the inn where I purchased the beer. Yesterday (the 22d), I could scarcely move, much less conduct the pencil. Thirst compelled me to go to the pump. The water was icy, and I vomited it. I had convulsions until evening; nevertheless I returned to the pump: 23d. My legs seem to be dead. For three days, I have been unable to visit the pump. Thirst increases. My weakness is so great, that I have only been able to write these lines to day: 26th. I have been unable to change my place. It has rained, and my clothing is wet. No one would believe how much I suffer. Whilst it rained, a few drops fell into my mouth, which has not however, appeased my thirst. Yesterday, at ten steps' distance, I saw a shepherd. I saluted him, and he returned my salutation. I die with the greatest regret. Wretchedness has imperiously driven me to it. Nevertheless, I pray that death may speedily come. My father, pardon him, for he knows not what he does. Weakness and convulsions prevent me from writing more, and I feel that it is for the last time: Sept. 29th, 1818."

Some suicides desire to conceal every trace of their death, whilst others destroy themselves with much ceremony. A woman resolves to drown herself, and throws herself into the Seine below St. Cloud, in order that her body may not be found. Many bury themselves in the depths of forests for the

same purpose. The English furnish numerous examples of suicides, executed with much ceremony, and attended with many singular circumstances. Vanity is present, even amidst the agonies of suicide. They prepare for death as for a feast day. Witness this enthusiast, who orders a high mass to be composed in music; causes it to be executed, and blows out his brains amidst the musicians, whilst they sing the last *requiescat in pace.* This peculiarity is very uncommon among us; at least, suicides do not wish, by the ceremony attending their death, to take a sort of revenge upon those who have impelled them to this act of despair. A lady who is the mother of several children, but addicted to pleasures, is guilty of certain improprieties of conduct. Her relatives consult with respect to her. She runs to all the armorers in the city, one of whom provides her with a loaded pistol, with which she shoots herself at the door of the hall in which her relatives were deliberating upon her fate. (Mathey).

A young man is attached to a lady, and on learning that she is married, goes to the house of the person who provides the marriage supper, and when the party have all assembled, blows out his brains.

There are persons impelled to suicide, who possess a degree of cunning and address, capable of baffling the attentions of the most carefully conducted watchfulness, and of disconcerting the most skillful. They bring about, or seize upon occasions with a degree of premeditation and craftiness, which one could by no means have anticipated. We must not allow ourselves to be imposed upon by composure or joy; by promises or oaths; for these persons destroy themselves when we least expect it, and often after having given the fairest assurances.

A young lady had previous to her marriage, when about the age of eighteen, a first attack of lypemania with a tendency to suicide. She marries at twenty, and appears happy. Five or six years afterwards, she meets with some slight difficulties. The menses flow sparingly, her countenance has a frowning expression, and she suffers from headache. She is anxious to recover from a condition, which appears to her the more dreadful, as she is no longer of any use in the management of her household, and a charge upon her husband and relatives. I offer her some advice, which the patient finds of service; but after the lapse of three weeks, she comes again to consult me. She expresses a strong desire to leave her home, in order, she says, to recover more speedily; besides, she shall never recover at home, nor among her relatives. Accompanied by her mother, she goes to a private hospital, to which I had referred them. I forewarned them to be on their guard; suspecting the intentions of the patient, in consequence of the earnestness which she manifested about being admitted into a strange establishment. She embraces her relatives and appears contented. The mistress of the house remains with the patient, who converses with composure and rationally respecting her condition; of the course she has pursued, and the resolutions she has formed, to do whatever should be prescribed for her. It was necessary however, that this young woman should be left alone but a few moments, to hang herself behind the door of her chamber, by attaching a noose to the hinge.

I have heard my colleague Blégnie state, that whilst making the rounds at Charenton with Royer Collard, these gentlemen stopped before the door of a lypemaniac, who had a disposition to commit suicide. Doctor Blégnie, who was nearest to the door, perceives it close, and suddenly opens it. This motion of it had been produced by the body of the lypemaniac, who had just hung himself while these gentlemen were conversing at his door.

A gentleman visits Paris, with his wife, daughter and two servants, to be treated for lypemania, attended with a disposition to suicide. I am consulted on the evening of their arrival, and forewarn his family to exercise over the

patient the strictest watchfulness, assuring them that they have every thing to fear from the slightest neglect. On the following morning, his wife and daughter are obliged to go out, and leave the patient, attended by the two domestics. One of them leaves the apartment for a moment, and the patient orders the other to look for something for him. The latter forgets the orders that have been given him, and had not descended two steps, when his master threw himself from the third story of the same stairway.

M. A., thirty years of age, was for two years in love with a young and beautiful lady, and at length obtains her hand. Behold both himself and wife, at the summit of human happiness. A month of married life has not passed, when the husband becomes sad and thoughtful; and is constantly repeating that he is unhappy, and experiences a weariness of life. Aside from this, he is not irrational. He consents to visit Paris, in company with one of his brothers. On his arrival, he is extremely anxious to consult me. He is of medium size, of a moderately full habit, his complexion sallow, and his look abstracted. He explains very satisfactorily the causes of his malady, and the motives which render life insupportable. He is jealous. I endeavor to dissuade him from entertaining this idea, and to reassure him. He appears to be persuaded, and consents to spend some days in Paris for the sake of repose and amusement. In the evening, he visits the theatre, retires to bed in the same chamber with his brother, and goes to sleep. At five o'clock in the morning, he rises and goes out with little noise. He returns at six, and informs his brother that he wishes to depart immediately for Rouen, in order to leave his country. The latter wishes to make a remark, but the patient, who had just supplied himself with two pistols, places the muzzle of one of them upon the forehead of his brother, saying: *if you do not wish to go, I—*. The unhappy brother falls fainting into an arm chair, the patient leaves the hotel, and blows out his brains in the forest of Bondi.

A lady, forty-eight years of age, of a lymphatic constitution, had made several attempts to commit suicide. She had tried to hang and to poison herself; she had also thrown herself into a well. I am called to attend upon her, and after some months she appears very well. Several circumstances seem to confirm the opinion that I have formed respecting her restoration. At the close of a long conversation with this lady, after she had decided to employ a cooling drink, which she had refused previously, I come to the conclusion that I can confide in her. The better to convince her that I thought her cured, I open one of the windows of her apartment, which were closed. She seemed to be delighted, and I leave her reading a journal, leaving with her a waiting maid, who was working embroidery, with her back turned a little towards the open window. I had not left the ante-chamber, before this lady had thrown herself out of the window. The first words she uttered, when they came to her aid were; *do not mention it to the doctor.*

M. N., disposed to lypemania with a tendency to suicide, was sad and thoughtful. After some months, he declares to his family that he is cured of his fatal thoughts; becomes gay, and converses freely. Some days afterwards, he embraces his wife and children with a degree of affection which was not then noticed, and hastens to throw himself into a river.

General A. enjoyed a large fortune before the revolution, and was an officer in the military establishment of the king. When twenty-five years of age, he becomes melancholic, and consults Bouvard, who says to him abruptly, when men are in your condition they blow out their brains. Struck with this opinion, given by a celebrated physician, young A. with difficulty refrained from putting it into execution. Ever since, the thought of suicide has been present to his mind, even on the day of battle at the head of his division. He died at the age of eighty-six years, and to the last, had constantly to struggle against this deplorable impulse.

All those who entertain thoughts of suicide have not the same perseverance, nor an equal share of address. There are among them, and these are the most numerous, hypochondriacs, who often speak of a distaste of life, and a desire of suicide. They make attempts, but are wanting in resolution. Some have such fear of death, that they request their relatives and friends to watch them carefully, and prevent them from fulfilling their designs. These patients manifest the characteristics of hypochondria. They are timid, fearful, irresolute, and very different from the lypemaniacs of whom we have just spoken. They are restrained by various motives. They do not destroy themselves, through horror of death; the fear of suffering, if, after their attempts they are severely wounded; and by the penalties with which religion menaces suicides. Others are preserved in being, through their affection for some relative or friend, or by a sentiment of honor; wishing to justify themselves for pretended wrongs, that they believe the public reproach them with. Finally, there are those who think that by not destroying themselves, they shall prevent the joy, and destroy the hopes of their real or supposed enemies.

M. A., remarkably hypochondriacal, has assured me that religious ideas had alone prevented him from committing suicide, to which he had many times been tempted during the existence of his disease. He had however, never made any attempts. A moral and religious education, in connection with noble and generous sentiments, have preserved him to life and his friends. Similar examples are not very rare, although religious motives are not always sufficient to arrest the arm of the suicide.

M. L., had cut his throat, and suffered from hallucinations of hearing, which led him to attempt suicide. But he was restrained from repeating it, through the necessity of justifying himself against a pretended accusation, which had determined his first attempt to commit suicide.

I have seen persons fully resolved to destroy themselves, and who resisted the impulse; restrained by their word of honor. General M., tall, with chestnut-colored hair and eyes, was of a melancholy disposition. One of his cousins had committed suicide. In the army, the General associated little with his comrades, took little exercise, and appeared to possess little activity, except on the day of battle. Ambitious and distrustful, he apprehended that they did not do him justice, although advancement had not been wanting, in view of his talents and bravery. At the fall of Bonaparte he retired into his province, and there married a young woman, beautiful, amiable, and endowed with excellent qualities. During the hundred days, the General, notwithstanding the opposition of his family, resumes his duties, wishing to do as his associates had done, and was present at the battle of Waterloo. He is disbanded with the army, and returns to his family, who receive him rather coolly, as well as the inhabitants of his county. This reception affects him deeply, and increases his natural disposition to melancholy and distrust. The General becomes sad, more sedentary in his habits, no longer goes out of his house, takes very little exercise, neglects his friends, and refuses all diversion. In 1815 he returns to active service; but it is for so short a period, as not to counterbalance the bad effects of his previously sedentary life. During the summer of 1816, one of the intimate friends of the General comes to spend a season with him, and is most cordially received. Shortly, however, the presence of this friend, who, by the confession of the General himself, had done nothing to occasion offence on his part, excites sentiments of jealousy, which cease not to make progress, and which at length degenerate into suicidal lypemania, attended with hallucinations.

The General, until this period so good, so affectionate, so anxious to serve his friends, becomes sad, morose, irritable, querulous; insulting his wife by his jealous remarks. His friend, lamenting this condition, hopes to put an end to it by leaving him. His departure however, only exasperates the Gene-

ral. He no longer leaves his apartment; a thousand suspicions harass him; his jealousy increases. He is passionate, and from abusive remarks proceeds to ill treatment. This conduct embroils him with the family of his wife, who, not believing that he is ill, accuse him of a perverse disposition, and decide upon visiting his house no more. Solitude becomes more complete. He engages in no occupation whatever, and his jealousy is exasperated. During the inspection of 1816, which lasts two months, the patient is overwhelmed by the anguish of his jealousy, and obtains no sleep. On reaching his family again, he is gay, and the kindness of his natural disposition is nearly restored. But these days of happiness are of short duration, and jealousy soon resumes its empire. The General every where witnesses proofs that his friend has become his rival. He believes him in bed with his wife, while he is himself by her side. He springs from it, arms himself with his sword, and seeks, first in his own chamber, and then throughout the Château, for the object of his jealousy; uttering imprecations and threats against his invisible rival, and despairing wife. At a later period, the General believes that the family of his wife, particularly his brother-in-law, favor these odious intrigues. The voices of those who speak or sing, the singing of birds, and the rustling of leaves, are also warnings. Often, notwithstanding the most profound silence prevails, he hears voices that insult and mock him. Unable to seize these infamous enemies, (for his rival has accomplices), the General calls upon them, defies and provokes them, runs about like a madman, pursuing them every where, armed with his sword. Having returned to his wife, he pours out upon her devoted head, his anger and despair. Nevertheless, he cannot refuse to do justice to the virtue of his wife.

Nothing can persuade the General that he is sick, that he needs attentions, and that all his disquietude is chimerical. At length, neither himself nor his wife wishing to remain there longer, he determines to come to Paris, where he arrives about the middle of July, 1817. The change of place and objects, together with the attention which he gives to the furniture of his apartment, divert and compose him. After some days, he relapses into his fever of jealousy. The cries which he hears in the streets, are also insults addressed to him by his enemies, through the instrumentality of his rival. They accuse of cowardice, him who has fought so well. He follows his wife at every step, who cannot pass alone from one portion of her apartment to another. His eyes are incessantly fixed upon her, and a glance, gesture or movement, and even complete repose, are also indications of an understanding with his enemy. If she weeps, he believes that she desires to have him understand that she is unhappy. If she smiles, it is a proof of friendship for his enemies. If she assumes a tone of firmness, it is because she believes that she shall be sustained by them. These wicked beings both see and hear through the walls and ceilings, all that is done and said in his apartment. Near the close of the month of July, sabre in hand, the General visits every part of the hotel where he is residing, and enters the apartments of all his fellow-lodgers, seeking his rival. It is with much difficulty that they prevent him from going into the street, as he desires to fall upon his rival, whom he has seen. On the following day, he manifests the same feelings towards the passers-by, and especially the shop-keepers, who exclaim; *coward, coward.* Unable to accomplish more, and giving himself up to his jealous frenzy, the General desires to put an end to his existence. One of his friends, a master commissary, who is prodigal of the warmest attentions, can effect nothing with respect to this erroneous sentiment, though the patient is irrational upon no other subject. He requires his friend to give him a potion, containing sufficient opium to cause him to sleep forever. To all the objections that friendship urges, the patient replies, by threatening to have recourse to means the most extreme and infal-

lible. At length, his friend appears to yield, and promises the potion at evening. The day is a quiet one. The General writes down his last wishes, and makes his will. The potion is brought to him. The patient swallows it with avidity, and retires to bed, awaiting patiently his last hour. Experiencing no decided symptom, he suspects that he has been deceived; reproaches his friend for his weakness; accuses him of having covered him with shame, and of having despised him to the degree of believing that he did not know how to die.

Having become almost furious, he is committed to my care Aug. 1st, 1817, and placed in a room on the ground floor, where he remains without light, from seven until eleven o'clock at night. I then visit the patient. Despair is depicted upon every feature of his countenance; his complexion is of a livid paleness; his eyes are injected; the skin is hot; and the pulse very frequent. I endeavor to persuade the General that I am a physician; but he persists in regarding me as a painter, brought to him to take his portrait, which is to be placed in public and sold, as we sell that of a criminal. After an hour's conversation, we become silent, during which, my eyes remain fixed upon those of the patient. After some minutes; "General, say I, you wish to destroy yourself, and for want of some other means of effecting your purpose, you wish to keep your cravat. You shall not take your life. I will restore you to health, and return you to your family and happiness. *To happiness!* cried he, *there is no more happiness for me.* Pardon me, General, I will restore you to happiness, and I wish to assure myself that you will make no attempt upon your life. Four attendants are going to remain in your chamber, and watch you, unless you pledge me your word of honor that you will make no attempt to destroy yourself. Take your choice, though I prefer your word. I give it you, he replied in a feeble tone. You must give me your word frankly, and like a soldier. After hesitating for some minutes; "Well sir, I pledge you my honor as a soldier." I retire, leaving the patient his cravat. On the following day I visit him, and congratulate him on having resisted his fatal design. I encourage him, and strive to gain his confidence. In the course of our conversation, the patient informed me that he had, more than twenty times, taken his cravat to strangle himself, but that his word of honor had restrained him.* I order leeches to the anus, and foot baths, rendered stimulant by mustard.

Aug. 3d. Sadness, same ideas, same conviction that his enemies are pursuing him; but the consolations which I lavish upon the patient, kindle a little hope in his breast. He acquaints me with the cause and duration of his disease, which he attributes to the sedentary life which he led, after the active duties of the field. Aug. 4th. Sensible amelioration. Although depressed and uneasy, the patient no longer entertains the idea of self-destruction. His appetite is good and his sleep tranquil. Aug. 5th. He consents to walk in the garden, and experiences the most delightful emotions, regarding nature with a degree of pleasure which he had not for a long time enjoyed. If I speak of his wife, his eyes moisten with tears, which he endeavors to conceal. On the eighth day, I propose to him to breakfast at St. Cloud. The weather was delightful. On the way, the patient says little, but seems to enjoy a new existence, and expresses his satisfaction. Never had the face of nature appeared to him more beautiful. From time to time his countenance lowers, and he is silent; believing that he hears his enemies in the midst of the park of St. Cloud. He suddenly stops; his eyes gleam; and his face becomes animated. Do you hear them, says he, the wretches? No, I reply. Not

* This case has been reported in the thesis of Dr. Anceaume, to whom I related it. *On Melancholy*, Paris, 1818, in 4to.

daring to show themselves, they hurl their abuse from above the trees. The murmur of the breeze among the trees, was the cause of his illusions. He heard the words, *coward, coward.* I express my astonishment, and in a few moments dissipate this unfortunate illusion. The remainder of the day passes very pleasantly, and on his return, the patient was placed in an apartment appropriate to the improved state of his health. This unexpected change occasions a sort of intoxication, which confirms the good resolves of the day. I feel as if I were born again, he several times repeated. On the following day, the General is gay, engages in various games, hears not the importunate voices, and no longer misinterprets the sound which is made around him.

Aug. 19th. The General receives an unexpected visit from his father, to whom he seems to be restored. He takes him to lodge at the hotel, where his wife had arrived. His cure seemed to be perfected. The patient believed himself happy. But from the following morning, he is less gay, his jealousy kindles again; and hallucinations of hearing are noticed. The General thinks he sees his rival in the street, who provokes him. However, ideas of suicide no more return, and the patient treats both his father and wife with kindness. He regrets, nevertheless, his not being with myself. At my visit, I divert him from the thought of isolation, and assure him that he wants agreeable occupation to remove the remainder of the melancholy that broods over his mind. Early in the month of September, I propose to him to accompany me on a journey to Belgium. He accepts the proposal joyfully. He often speaks of it, but delays his preparations. The difficulties which he experiences in obtaining a passport, causes him to believe that his enemies oppose his journey; but so soon as it is secured, he is satisfied, and applauds himself for having obtained the victory over his pretended enemies. On the eve of departure, the choice of a carriage not being yet fixed upon, he supposes, from the new obstacles which are offered to this arrangement, that his enemies will prevent him from fulfilling it. Nevertheless, we commence our journey on the 15th of Sept., and the patient is almost overcome by his pleasurable emotions. But before arriving at the third post, he takes the passengers in a carriage which meets our own, for the agents of his enemies, and relapses into sadness.

On the following day, he wishes to visit one of his friends, who lives at some distance from the city, where we passed the night. He experiences some delay while on the way, which he attributes to the manœuvres of his enemies. However, he reaches the residence of his friend, and writes me the next day, that, at length, he had found happiness; that he was with his friend; and desires me to take every possible precaution to conceal the place of his retreat. For three weeks, the General enjoys most perfect health, and believes that he is delivered from his rival and enemies. He writes his wife and relatives letters, full of expressions of tenderness, and of the pleasure he enjoyed. After the lapse of this period, he no longer finds himself in security where he is, and is suspicious of his friend, his wife and domestics. He barricades himself nightly, in his chamber. At length, he deserts the house, unknown to every one, returns to Paris, and comes to see me again on the 21st of Oct. I was still absent, and the patient persuades himself that they are deceiving him.

A few days afterwards, my return causes hope to spring up again in his breast; and he consents once more to separate himself from his family. I order leeches frequently, to the anus. Frequent and abundant epistaxis dissipates the cephalalgia; drives away melancholy thoughts, and renders the patient more disposed to diversions. At the expiration of a month, the brother-in-law of the patient, whom the latter had always regarded as one of his worst enemies, comes to visit him; is cordially received, and finds in the General,

the same friendship and confidence as formerly. By proofs of attachment, and diversions, the brother-in-law succeeds in dissipating every indication of disease. This happy change continues but for three weeks; at the end of which, suspicion revives, and with it hallucinations. The patient receives the visit of his wife and one of his relatives; appears gratified, happy, and perfectly composed for some days, and then relapses into his unhappy delusions. He joins his family, and passes three months in Paris with his wife, her mother and brother. He treats them at first extremely well; but is then overcome by his jealous suspicions. Always manifesting great confidence in me, as well as friendship, he is pleased to see me; hears my advice, and employs some of my prescriptions. After the lapse of three months, passed in alternate states of well-being and of grief, the General returns to his own estate, designing to make certain tasteful improvements, and to engage in exercise. On his arrival, he finds himself well, but is not slow to resume his solitary course of life, and again becomes suspicious. Paroxysms of jealousy return from time to time. At length, after some months, his wife is obliged to leave him and return to her family. The General remains alone, a prey to his jealous griefs and suspicions; now well, and now ill; but having made no farther attempts at suicide. Several years elapse, before it is possible again to bring together the General and his wife; nothing successfully overcoming his jealous passion.*

Those who endeavor to destroy themselves, do not always succeed in effecting their purpose. Among a hundred individuals who make the attempt, not one half succeed. Those who have escaped their own proper fury, present very different moral and intellectual dispositions. Now, having thrown themselves into a river, they swim to gain the shore and call for aid. After having thrown themselves into a well, they employ every means to escape, and point out the precautions which are necessary to effect their rescue. They congratulate themselves on account of their failure. They complain of pains from which they have long suffered, or of recent ones caused by wounds and contusions, which they have themselves produced. They reveal the motives which have led them to attempt self-murder, and manifest for the first time, disorder in their ideas. They are mortified, and express regret at having been driven to this excess. The fear of death, seen but too near, together with the physical and moral shock which they have experienced, has cured them. Now, suicides who have been rescued in time, pursue their designs with new fury; lament their unskillfulness, and repel the attentions that are offered them.

A person throws himself into the Seine, and the sailors draw him out by his feet. When his head reaches the surface of the water, he makes the greatest efforts to plunge in again. A woman had thrown herself into a well, and allows herself to fall back three times successively, when near the top of it; so that it was necessary to bind her, in order to withdraw her. Many of these wretched beings, remove the bandages placed upon the wounds that they have made, and enlarge them with their fingers. They also make use of pieces of the apparatus or clothing employed to restrain them, for the purpose of strangling themselves. I have seen them retain in their fauces, the food and drinks that were given them, hoping to asphyxiate themselves. These wretched beings are insensible to physical suffering. All sensibility is annihilated. Nothing can snatch them from their fatal purpose. In these cases, the disease persists in allits intensity, and the patient requires the most

* This case, as well as several others, which may be found in the chapter on *Suicide*, were published in 1820, in the supplemental journal of the medical sciences, by one of my pupils; as errors of more than one kind found their way into it at that time, I republish the facts, as I collected them.

careful and constant attention. Thus it is, among persons who have attempted to destroy themselves. With some, the attempts have been succeeded by a remission and even cessation of the malady. With others, they appear to aggravate the evil.

Suicide, like all those diseases of which it is a symptom, is acute or chronic; continued or intermittent. M. Alibert had charge of a lady who, during the process of digestion, could not prevent herself from entertaining a desire for self-destruction. She was many times surprised after dinner, passing a cord about her neck. It was then necessary to watch her very closely. I have had charge of several women who, during pregnancy, were tormented with the same desire. It is frequently the case that we see women who, during the menstrual discharge, desire intensely to destroy themselves, and make attempts to effect this purpose; but who cease to entertain this desire so soon as the menstrual period is closed, or the change of life has taken place.

M., very tall, and of a vigorous constitution, lived for some time in the Caribbee Islands. He escapes the yellow fever, returns to France, and experiences rheumatic pains, which are exasperated during the winter. At the age of thirty-six years, he breakfasts with his family, takes a cup of chocolate which his wife presents him, and shortly after experiences colic pains. This unfortunate man immediately persuades himself that the family of his wife are anxious to destroy him, and that his wife has been constrained to offer him chocolate containing poison. In despair, he cuts his throat with a razor, and remains voiceless. On the succeeding year, in the month of February, there are the same pains, and the same sentiments. He attempts to strangle his wife, and gives himself several strokes with a knife, upon the left temple and forehead. The same attempts are renewed on the two succeeding years. For several years, the disorder extends so that the mind embraces many erroneous views, and the understanding is weakened. He often disputes with distinguished personages, particularly M. Talleyrand, and indulges in the most abusive threats, but makes no farther attempts upon his own life, or the lives of others.

A young man from the south, aged twenty-five years, of a remarkably nervous temperament, at the approach of winter, for three successive years, is seized with a violent excitement. He is then very active, and always in motion; converses much; thinks himself possessed of a remarkable mind; lays out a thousand projects; gives away much money; purchases and borrows, without troubling himself much with respect to payments. He is very irritable. Every thing offends him, and excites transports of anger. He no longer regards the friendship of his relatives, nor does he recognize even the voice of his father. So soon as the influence of spring begins to be felt, he becomes more composed, and by degrees less active, less talkative, and less susceptible. In proportion as the temperature rises, the physical and intellectual forces grow weak. He falls into a state of inactivity and torpor; reproaches himself for all the extravagances to which he has yielded himself during the period of excitement; and at length becomes a lypemaniac; first desiring, and finally attempting to destroy himself.

A lady, forty-eight years of age, regretting the loss of society, sinks into lypemania. She suffered from hallucinations of hearing, and believed also, that she smelt the grease with which the axletrees of carriages were lubricated (coom). Whenever she was disturbed by this odor,—although she might not be near any thing that could produce it, she became sad, and was disposed to injure herself. The paroxysm usually occurred in the evening. The remainder of the day she was very well, and even gay.

Mad'e de B. had several attacks of a suicidal propensity, always produced by hallucinations of sight, and religious scruples. On one occasion, she saw

a bloody head separated from the body, and covered with black crape. On another, it was an entire skeleton in steel. She saw and heard also, a procession. These images were fixed in the left temple, above the eye; pursued her every where, and wearied her as well during the night as the day. The attack lasted from one to three months. At each of them, the hallucination changed its object. The patient would always choose opium, hoping to die without pain. At the age of sixty-eight years, she took a strong dose of it, and experienced for many hours before her death, the most frightful pains. The lady whose deplorable end I have just noticed, formerly had a cousin who, sad and taciturn for a considerable period, had often manifested a suicidal disposition. A journey is recommended, to which she gives her assent, and makes preparations, which seem to divert her. The horses were attached to the carriage, and the moment when her son, who was to accompany his mother, offers her his hand to assist her into the carriage, she remarks that she has forgotten something, returns hastily to her apartment, and does not come down. He, after waiting some minutes, goes to assist her down, when he finds her expiring. She had just poisoned herself. This same son, after having been cured of a monomania, and enjoyed good health for twelve years, blows out his brains, despairing of the fall of Bonaparte, whom he had desired to overthrow while a monomaniac.

R. V. B., sixty-nine years of age, is the offspring of a very passionate mother. She is also rickety, and of extreme susceptibility. When thirty-four years of age, a moral affection determines her to throw herself into the Seine. At the age of thirty-six years, when two months advanced in pregnancy, her husband dies. A second attack follows, which does not terminate until after her confinement. At the age of thirty-seven, she meets with trials, attended by a suppression of the menses for a year. A new attack succeeds, which is dissipated only after the return of the menses. At forty-one, a fourth attack, caused by the events of the revolution and disquietudes respecting her children. At forty-eight, an attack which is induced by no known cause. At fifty-four, cessation of the menses, preceded by a very abundant uterine hemorrhage. At sixty-one, a sixth attack; trifling, and caused by slight vexations. At sixty-three, the attack is provoked by troubles; persists for several months, and is very violent; since which time, cephalalgia is violent, and there is an intermission of only four months. At sixty-four, an eighth attack; and the patient made the most powerful efforts to strangle herself. She also swallowed pins. At sixty-seven, an attack like the preceding ones. At sixty-eight, an attack of trifling severity, but the period of prostration was of considerable duration. Ever since the first attack on each year, during the heats of summer, the patient experiences slight turns of sadness, attended with a desire to destroy herself, which are dissipated by pediluvia and diversions.

The attacks always take place in summer, and are variable with respect to intensity and duration. Their approach is announced by insomnia and flashes of heat, which ascend to the head. The face is flushed, and the sensibility is exalted. When in this state, the most trifling contrariety,—a source of vexation of no consequence at any other time,—determines the explosion of the delirium. At the commencement of the attack, the patient experiences febrile symptoms. She recognizes every one, but talks incessantly, utters abusive language, and makes obscene remarks. She seeks all means, and makes the most violent efforts to destroy herself. She then seems furious. Although her appetite is good, she becomes emaciated. Constipation is obstinate, and after a period of agitation, her limbs feel as if bruised. She is overcome. She does not even stir. She sometimes talks to herself in a low voice; suffers from cardialgia, but gains flesh. Sleep returns, and with it strength, though she eats less. In the intervals, she is perfectly rational, gives

a good account of her condition, and remembers whatever she has done. She is also very much mortified and grieved, in consequence of it. She feels the need of exercise and occupation. After the age of sixty-four years, the intermissions are shorter,—of not more than two months' duration, and the period of prostration longer.

I have elsewhere mentioned, that her daughter has had several attacks of mania, and that her grand-daughter had a first attack at the age of fourteen years, attended with efforts to destroy herself. The daughter of this patient is at Charenton, in a state of mania, bordering on dementia; and her grand-daughter died at the age of twenty-one, a lypemaniac, and phthisical.

PATHOLOGICAL LESIONS OBSERVED AMONG SUICIDES.

All that I have said hitherto, together with the facts which I have related, prove that suicide offers all the characteristics of mental alienation, of which it is, in reality, a symptom: that we must not look for a single and peculiar sign of suicide, since we observe it under circumstances the most opposite, and since it is symptomatic or secondary, either in acute or febrile delirium, or in chronic delirium. Finally, the opening of the dead bodies of suicides, has shed little light on this subject. M. Gall believes, that the cranium of suicides is thick and dense. I have in my collection many crania, which disprove this opinion. With the crania of several suicides, I have sought to ascertain whether the proportions of their different diameters could be reduced to a mean; but did not succeed in obtaining this result. I possess the crania of suicides whose antero-posterior diameter is very great, whilst that of some others is scarcely equal to the lateral one; so that in the former, the crania are very much elongated, whilst in the latter they are almost spherical. I may, one day, publish a draught of these crania, and the examinations which I have made with respect to their thickness, density, diameters, capacity, etc.

Home has seen the vessels of the dura-mater very much dilated. I have also observed it; but it is not constant, nor peculiar to individuals who have terminated their own existence. Freteau mentions two cases of suicide, which he attributes to the stagnation of a thick and poisonous blood in the interior of the cranium. M. Recamier found, in the case of a man who died four days after poisoning himself, at the anterior portion of the left hemisphere of the brain, an ossification of the dura-mater, of a circular form, and an inch in diameter. The arachnoid membrane was opake and thickened. This alteration was met with in two persons who had made no attempt upon their lives. Loder found the corpus callosum very soft, and M. Gall affirms that it is disorganized. We read in Hufeland's *Journal of Medicine*, (1812 and 1813), that there was found in a cyst, above the right ventricle of the brain, an osseous concretion, an inch in length, and three lines in breadth. Cabanis pretended, that the brain of the insane and of suicides contains more phosphorus than that of other men. M. M. Desgenettes and Callière, speak of a soldier who, obstinately refusing to eat, died, after refusing and accepting food alternately, for several months. On opening the body, the brain was found consistent, but not injected; the cerebellum was healthy; the transverse colon perpendicular; and the gall bladder contained black, thick and viscid bile. This displacement of the colon is frequent in lypemania, and I have given several examples of it, on page 168 and the following, and have observed it also among the insane who had an inclination to suicide. Fourcroy, and several physicians, think that we usually find concretions in the gall bladder. This alteration is however rare. The same is true of organic lesions of the liver, which authors have often regarded as the cause of melan-

choly and suicide. However, Fodéré relates the following case. The niece of a curate to whom I was physician, intelligent and virtuous, grew old in a state of celibacy. She conceived, on account of it, an extreme weariness of life, and resolved several times to destroy herself, by taking various very active articles; such as tartar emetic and others, whose fatal effects we succeeded in obviating. The mischief however, was already accomplished. Anasarca of the inferior extremities appeared, and at the same time the disposition to suicide ceased, and reason insensibly returned. On being consulted in this case, continues the learned professor, I found the liver painful, of a scirrous hardness, and after a suppurative fever, and other symptoms, I could not doubt that there might be, in this viscus or its neighborhood, one or more seats of suppuration. M. Osiander regards lesions of the heart and inflammations of the abdominal viscera, as the cause of suicide.

Doctor Alberts of Gottengen, believes that lesions of the heart are frequent among suicides. Corvisart entertained the same opinion. It acquires much more weight, if we remember that palpitations are frequent, and if we compare the post-mortem examinations of suicides, with the symptoms of which they complain, before attempting to terminate their existence. Sometimes we find no injuries, other than those which are the effects of attempts to commit suicide. Joseph Frank opened a body, in which he found no alteration, at least none perceptible to the senses. I have examined the bodies of some suicides, without finding any primitive lesion. The post-mortem examinations which I have made in person, or caused to be made under my own observation, having presented nothing constant, I shall content myself with relating a small number of them.

M. C., the son of a very passionate father, has lost three brothers, all of whom committed suicide. A fourth has had several attacks of mania, and a maniacal sister has several times endeavored to destroy herself. He is about thirty years of age, of medium size, has blond hair, blue eyes, an ordinary degree of fullness of habit, and is endowed with a great degree of susceptibility. He paid every attention that fraternal affection could suggest, to one of his brothers who had attempted to destroy himself. The latter ascends into a garret; M. C. pursues him, and at the moment when he was about to reach him, the patient throws himself from it, exclaiming; *follow me.* Most deeply affected, he believes himself guilty of the suicide of his brother, and accuses himself of having been wanting in watchfulness. He immediately persuades himself that his family will demand of him an account of this suicide. The thought fills him with despair, and he wishes to destroy himself. A month afterwards, he makes several attempts, and is committed to my care. I quickly succeed in reassuring him, and fifteen days had scarcely elapsed, when I engage one of his brothers, who was a physician, to travel with the patient. The two brothers set off on their journey. From the third day, the same disquietudes revive, the same impulses are manifest, many attempts at suicide are made, and the patient is committed again to my charge. By means of the most careful attentions, I once more succeed in awakening in his breast a desire for life; but on this occasion, I do not hasten his removal. He remains sad, morose and uneasy; at times his disquietudes return again, and he passes, at different intervals, several days without eating. Constipation is obstinate, and almost insurmountable. The sight of his brother augments his grief, because, says he, my brother cannot pardon me. He sees his other relatives, but with dread.

After a period of eight months, he appeared better. Hope revives in his breast. He also converses and takes exercise, and forms with his brother, projects for the future. Two months pass thus, when suddenly, and without any known motive, he refuses every kind of aliment. For twenty-one days

he takes nothing. From the twelfth day of his abstinence, he ceases to leave his bed, and his emaciation is very great. The secretions are suspended, and his feebleness is extreme. We often hear the patient repeating; *How much it costs to die!* Every means employed to surmount his resolution, is fruitless. On the nineteenth day, he manifests an adynamic condition. He then desires to eat, but swallows with difficulty, a few drops of liquids. Tormented by thirst, he is no longer able to drink. His body is drawn together, his limbs rigid; his legs of a purple color, and very cold. On the twenty-first day, he becomes speechless, smiles convulsively, and dies on the twenty-eighth day. On opening the body, I found the brain hard and violaceous, as if it had been injected with violet-colored wax. The sinuses of the brain were atrophied, and the transverse colon almost perpendicular.

F., thirty-three years of age, is brought to the Salpêtrière in a state of fury. Admitted on the 10th of June, on the 13th at four o'clock in the morning, she is found strangled. She had tied the sheets of her bed around her neck, and fixed the extremities of them to its foot-posts. She had then slipped under the bed; and had probably strangled herself by making efforts, as if she intended to conceal herself beneath the couch. On the evening previous, she had been walking about, and nothing had occurred to inspire the least disquietude. On the following day (the 15th), we make an examination at ten in the morning. The face was purple. Traces of compression were remarked on the anterior and lateral regions of the neck, by means of the ecchymosis. The abdomen was voluminous, and distended with gas. The integuments of the cranium were very much injected, and the cranium itself was very much depressed towards the right temple. The sinuses of the dura-mater were engorged with blood, as well as the vessels of the arachnoid, pia-mater and choroid plexuses. The capacity of the ventricles of the brain was, in every respect, very much diminished. The pineal gland presented small concretions; and the pituitary body enclosed a reddish serum. The lungs, slightly engorged with blood, adhered slightly to the pleura costalis.

Permit me here to relate the deplorable end of a young physician, of the highest promise, twenty-five years of age; a native of one of the southern provinces, and descended from a family, of which several members have been, or still are, insane. This young man, who was of a nervous-sanguine temperament, of great susceptibility, and of a very lively disposition, devoted himself with interest, to the study of mental diseases. His researches on melancholy were published.* Certain trifling criticisms, and still more, the little interest which certain friends manifested in commending his book, which is in truth a valuable work, affected him keenly. He often spoke to me of the criticisms, and more frequently still, of the remarks that had been made upon his book in learned societies. Indignant, or perhaps dissatisfied with the world, which had treated him with so much injustice, he conceived a disgust for life. He was sensible of his condition, for he went to pass some time in the country. On his return, he took eighteen grains of opium. He was scarcely incommoded by it, and related this event as a matter of indifference. He suddenly disappeared from Paris, and some time after, I learn that this unhappy man had gone into Touraine, and that there, in a public house, had strangled himself. He tied a cravat about his neck, and to this fastened several napkins, attaching them to the foot of his bed. Extending himself on the floor on his back, he placed his feet against the bed, which served him as a fixed point, for effecting the strangulation.

Mad'e, thirty-three years of age, experienced domestic trials, made several attempts upon her life, and was sent to the hospital. She was tall, very much

* *Medico-Philosophical Researches on Melancholy;* by Luce Roubeau. Paris, 1817, in 12mo.

emaciated, and of a gentle disposition. She, at first, made several attempts to strangle herself, but not succeeding, refused to eat. After two months she appeared more composed. Nevertheless, during the month of August, she swallowed a thimble and piece of money, as well as sewing needles. She often said; *Let me go home.* Aside from this, she was not irrational; but was sad, sought retirement, walked about with a slow step, and did not speak. She could never be induced to work. She often wept, was constipated, and slept little. On the eighth of September, without any thing occurring which caused us to fear that she would injure herself, though she still entertained a desire to die; she slipped herself through a ventilator, in an old dormitory, which had been for some time abandoned, and there suspended herself with a very small cord, attached to a nail which she found in one of the walls. She had stood upon two rough stones. She was found with her back against the wall, the face livid, but no froth issuing from the mouth. The arms hung by the side of the body, the hands of a violet hue, the feet extended, and of the same color. One of the stones was beneath her feet; the other, a few inches distant from them. On opening the body, we found the impression of the cord passing obliquely around the neck, directed behind the ears and without ecchymosis. The skin which covered the depression was of a brown color, depressed and dry; and beneath, the compressed cellular tissue, formed a shining white band a line in breadth, *without any infiltration of blood, either above or below the depression.* The coronal portion of the cranium was retreating, and the parietal protuberances prominent. No alteration in the brain nor in its envelopes, which were injected. The right lung was engorged with blood in its posterior and inferior portion. Liver voluminous and reddish. The transverse colon was directed towards the pubes, and the large intestines distended with gas. We did not find those foreign bodies that were swallowed two months before her death.

A person named L., thirty-three years of age, of a lean and slender habit, and of a nervous-lymphatic temperament, has always enjoyed excellent health and perfect tranquillity of mind. She had during her youth, no grave malady. At the age of thirteen and a half years the menses appeared, and she seemed to her parents to be very well. In 1814, frightened by the dangers of the siege with which Paris is threatened, and more still by the presence of the enemy, she experiences so great a degree of disquietude, that she is suddenly seized with hemiplegia, and this paralysis was not preceded, according to the statement of her parents, by any symptom of cerebral hemorrhage. She enters the Hospital St. Louis, from which she is discharged some time after, almost cured. But her disposition, it is remarked by her friends, is entirely changed. To her ordinary gayety, has succeeded a profound sadness. She is no longer fond of society, which she was formerly accustomed to seek, and wishes to be alone. She coughs and expectorates freely, yet without experiencing any local pain. Suddenly she breaks her habitual silence. From being sad and thoughtful, she becomes agitated, and is tormented by remorse for crimes which she believes she has committed, and seeks every means of putting an end to her existence. Heaven, she affirms, abhors her. In this condition she was brought to the Salpêtrière. I cause her to be placed in the infirmary. She walks with crutches, is sad, and often speaks of self-destruction. Eight days afterwards, she throws away her crutches, walks with rapidity in the hall, and goes to a window of a very lofty second story, and after some hesitation, precipitates herself from it. She fell upon her right side, the whole of which was frightfully mutilated by the fall. However, she makes no complaint of the pain which she must experience. The fall augmented the excitement of her mind. She displays her arms all covered with the blood which she says she has shed, and sees in those who are lavish-

ing their attentions upon her, only the executioners, who are to lead her to punishment. Every time we approach her, she is frightened, her features are contracted, and she conjures us not to cause her to be conducted to the guillotine. This scene of horror lasts for about two days; when she dies, a prey to her heart-rending terrors.

The post-mortem examination was made by Doctor Amussat, then house pupil at the hospital Salpêtrière. *Head.*—No apparent lesion in the brain, its membrane, or in the spinal marrow. *Thorax and abdomen.*—Several ribs of the right side are fractured. The left lung is healthy. The right encloses a cyst filled with hydatids, situated precisely over a similar one with which it communicates, occupying almost the whole of the liver, which adheres to the diaphragm, which is itself pierced to permit the two cysts to communicate. The medium of communication between the liver and lung is very narrow. We find a similar case in Bonnet.

M., the victim of onanism, was in a state of monomania complicated with dementia. He was found suspended from his bed. Nothing had caused the least fear of this event; no previous attempt having been known to take place. With a band which contained the apparatus of an exutory, he had formed a handle two feet in circumference, and had connected it to the ring of his bed. His head was passed through the support thus fastened, and the body left to its own weight. The anterior part of the neck reposes upon this support. The arms are pendant; the legs crossed and slightly flexed; and the feet repose entirely upon the bed, the surface of which is only four and a half feet distant from the ring through which the handle has been passed. The face was tumefied and of a purple color; the eyes were widely opened and glistening; and there was a little sanguineous mucus around the mouth. The forearms and hands, the legs and feet, were rigid and violet-colored; the veins were large and engorged with blood; and the penis, partially erected, presented a drop of fluid at its orifice. Some stains of the same fluid were noticed upon the thighs. The scrotum was of a purple color, and the abdomen swollen, distended, and filled with gas. The body was examined on the following day, thirty hours after his supposed death. There was an oblique depression of the skin of the neck, extending from the thyroid cartilage, beneath the mastoidean apophyses, towards the occipital protuberance, of the breadth of three lines, more distinctly marked on the right. The depressed skin was of a yellowish brown, hardened, and as it were, burned. Towards the occiput, the skin was less dry and brown; and above the depression an effusion was formed. The subjacent parts presented nothing remarkable, except a slight sanguineous infiltration some lines in breadth, upon the external face of the thyroid, and into the substance of the superficial muscle. The left jugular vein, for the extent of three lines beneath the depression, was of a dark gray, and a little above, its internal coat seemed to be broken, and its cellular tunic presented a vesicle formed from the blood, which had escaped by the rupture of the internal one. The cranium was thickened, the blood-vessels and sinuses of the brain were gorged with blood, and the cerebral substance was soft. The abdomen was distended by intestinal gases. The stomach contained aliments partially digested, and its mucous membrane was interspersed with rose-colored and brownish spots. The mucous membrane of the small intestines, near the cœcum, for an extent of six inches, was red.

A woman whom we had long since placed in the division of the insane, in the interior of the hospital, suffered from time to time, it was said by her companions, from attacks of mental depression. Nevertheless, she was accustomed to bestow certain attentions upon some little children. She was opposed in this matter, threw herself from the fourth story, fell upon the flag-stone, and died some minutes after. The cranium was broken into several frag-

ments, which were retained by the hairy scalp and the pericranium, particularly the right parietal and coronal of the same side. The cranium was very much injected, as well as the meninges and brain. The vessels of the meninges were very much distended. All the bones were fractured, even the body of the sphenoid and the vertebræ of the neck. The liver was ruptured in several places, as well as the spleen, whose form we with difficulty recognize.

Some years since, a woman threw herself from a first story which was very high. She fell upon her head and died immediately. The bones of the cranium were broken into a great number of fragments, even the body of the sphenoid. The brain had lost a third of its volume. It was very dense, and the space which it might formerly have occupied in the cranium was filled with black and fluid blood. We read in the Memoirs of the Royal Society, that in the case of a hysterical girl who had hung herself, one of the ovaries was found broken, as if it had been burst by a fluid which it contained.

M. L., forty-one years of age, and of a strong constitution, participated in the war of la Vendée, and supported the fatigues, reverses and frauds, which followed this fatal war. The times having become more quiet, he lives in the country, experiences some trifling difficulties and acts of injustice, becomes sad, gloomy, suspicious, and believes that his enemies will take his life by poison. He loses his sleep, appetite, etc. After some months, he becomes unwilling to go abroad, to see his friends or connections, and refuses nourishment. If it is insisted upon, he flies into a passion, and becomes dangerous. In this condition he is committed to my care. Change of place, the sight of new objects, the devoted attentions of strange persons, make upon the mind of the patient a favorable impression. He is less solitary, walks about, converses more willingly, takes his food regularly, and consents even to employ some remedies. After the lapse of fifteen days, when the condition of the patient seemed to be ameliorated, he suddenly refuses food, and confines himself to his bed. His physiognomy is expressive of gloom, his complexion is more sallow, and his eyes injected. Four days after this he vomits mucous matter; repulses every one, and rejects all the attentions, remedies, and every variety of aliment that is offered; constantly repeating that he has been poisoned. On the sixth day, he vomits mucous matter mingled with very black blood. On the seventh day, the prostration of the vital forces is extreme; the patient can scarcely reply to questions that are put to him, and the pulse is very frequent and feeble. He several times vomits blackish and very fetid matters. On the eighth, he consents to drink some gum-water, but refuses all medicine, and dies on the twelfth day.

On opening the body, I find the meninges of the brain in a normal state, and the ventricles containing serum. The stomach and duodenum present no alterations, but the whole of the mucous membrane of the transverse colon is contracted into deep folds, thickened and soft. It is covered with a reddish mucus, like lees of wine, which being removed, reveals a surface of a violet red color, sphacelated at several points. The same lesion extends to the superior portion of the descending colon. The remainder of the intestinal tract is healthy. Several polygonal calculi, formed of a yellow and blackish substance, fill the gall bladder. The liver presents a greasy aspect.

A man, thirty years of age, and who was married at nineteen, six years afterwards is devoured by jealousy. He destroys his wife, is put in prison April 15th, 1831, and dies June 17th, after an abstinence of sixty-one days; the wretched man having taken, during this long space of time, only water and a few spoonsful of broth. On opening the body, it was found extremely emaciated, and its weight 66 kil. (132 pounds). The cranium is thickened, and the white substance of the brain is dense, particularly at its base. There

is unusual density of the cerebellum and of the spinal prolongation. The heart is pale, flaccid, and easily torn, as well as other muscles. The stomach contains six ounces of a greenish liquid, and its mucous membrane, though very resistant at its cardiac extremity, is more and more soft towards the pylorus. The alimentary canal is atrophied, and the small intestines somewhat contracted; its mucous membrane, at the extremity of the ilium a little red, and the transverse colon oblique towards the pubes. The liver is dense, red and granulated; and the gall bladder distended with thick, blackish and clotted bile. The spleen is dense. The thigh being sawn through, the marrow of the medullary canal was found in its normal condition. This case, which was drawn up by M. Desbareaux-Bernard, may be read, with all its details, in a memoir published at Toulouse, in 1831.

From the cases related by authors, and from those which precede, what consequences can we deduce, so as to determine those organic lesions which will enable us to fix upon the seat of suicide? In this respect, we experience the same difficulty as in assigning the seat and organic lesions, of whose existence the delirium of mental maladies informs us.* Nevertheless, if we consider that in the various cases of suicide, accompanied by post-mortem examinations, lesions of the brain are rarely discovered, and that we meet with frequent changes in the organs of digestion, particularly of the alimentary canal; may we not believe that organic changes of this tract, are especially connected with the resolutions of suicides, who determine to permit themselves to die of hunger?

TREATMENT OF SUICIDE: MEANS OF PREVENTING IT.

Suicide being an act consecutive to the delirium of the passions or insanity, I ought to have little to say respecting the treatment of a symptom; a treatment which belongs to the therapeutics of mental diseases, and reposes essentially upon the appreciation of the causes and determining motives of suicide. Therefore, it is to the treatment adapted to each variety of insanity that we must have recourse, in treating an individual urged on to his own destruction; just as it is necessary to go back to the councils of religion and public morals, when we would prevent the numerous suicides that are provoked by a general error of opinion, and the exaltation of the passions. I would have limited myself to these general remarks, were not suicide so grave a symptom as to render it important that we should avail ourselves of all possible means of combating and preventing it. Suicide is sometimes cured spontaneously, like mental diseases; through the influence of hygienic agents, by some physical or moral crisis; or by the aid of medicines. Pinel speaks of a certain scholar who, being in London for the purpose of dissipating a melancholic affection, was going to drown himself in the Thames, when he was attacked by robbers. He defended himself against these ruffians, and forgot the purpose which had led him from home. This gentleman died at the age of eighty-four years; and although often reduced to the necessity of receiving aid from his friends, he did not again experience a desire to destroy himself.

A young man wishes to take his life, and goes out to purchase a pair of pis-

* M. Leuret, in the article Suicide, in the *Dictionary of Practical Medicine*, has given us a summary of sixteen post-mortem examinations of suicides, and his conclusion is as follows: In seven of the bodies, there were no other lesions than those produced by the character of the death; and in the nine remaining ones, the changes were so varied, that we could infer nothing from them, relative to the nature and seat of suicide. M. Leuret adds, that all those individuals with whom he was concerned, were very clearly insane, before committing the fatal deed. *See* Dictionary cited, t. xv. p. 85.

tols. The gun-smith demands an exorbitant price; he becomes irritated, disputes with the dealer, and forgets that he wanted to purchase arms wherewith to destroy himself. How many people are there who, after an ineffectual attempt to take their own lives, no longer entertain a thought of it; because they have been frightened by the risk that they run, or saw death so near at hand, as to desire no more immediate intercourse. A lady desires to die of hunger, because she has openly betrayed the secrets of her heart. Attentions and consolations, the assurance that no one credits what she has said, and the hope of seeing her lover whom she supposed dead; cause her to entertain once more a desire for life, and she decides, not only to take nourishment, but to do whatever is recommended, with a view to her entire cure.

An ecclesiastic twice threw himself into a well, after having fallen into the most profound lypemania, in consequence of the horrors of the revolution. At the time of the publication of the first concordat, he is angry and indignant: and sets to writing against a compact, which he considers derogatory to religion; and is in a little time cured of his melancholy and disposition to suicide. Moreau de la Sarthe relates an analogous case, in the second volume of the Memoirs of the Medical Society of Emulation. A woman loses a part of her fortune, becomes depressed in mind, and desires to destroy herself. Still greater misfortunes ruin her. The exercise and labor called forth by this new position, suffice to cure the patient. A lady, in consequence of certain trials, suffers from a suppression of the menses. She has pains in her head, and desires to terminate her existence. After the lapse of four months, she leaves her house, and places a letter upon her secretary informing her husband, that weary of the troubles of life, she is going to drown herself. She proceeds to St. Cloud to execute her purpose; being unwilling that they should discover her body. On the way her menses appear. She immediately feels very well, and returns home. She goes to the commissioner of her ward, and relates to him the above account, to which the public seals were affixed. How many women come to us at the Salpêtrière, whom wretchedness and domestic trials have decided to terminate their existence, and who are restored by affectionate attentions and consolations; by the hope of a more propitious fortune, and good nourishment! Many of these wretched beings renounce their fatal design, when removed from all the means of destroying themselves, and convinced that we shall cause them to live, in spite of their resistance. Who does not perceive in all these facts, the same phenomena which are observed among the insane, whatever be the character of their delirium?

Some physicians have proposed a specific treatment for suicide. Persuaded that the liver is the seat of the evil, and that the bile is the prime cause of it; some recommend what are called hepatic purgatives. Others believe that we should bleed, so as to unload the great vessels of the brain. The latter holding that the tendency to suicide, is the effect of the weakness or oppression of the vital principle, have recommended tonics in large doses. I can say that bark, in combination with opium, hyoscyamus and musk, has sometimes succeeded in modifying the sensibility of this class of patients, and in procuring sleep. These means however, would not be applicable to all cases. Subjects enfeebled by onanism, are much benefited by the cold bath, and even aspersions of cold water. Avenbrugger proposed an exutory over the region of the liver, and copious draughts of water. The celebrated Theden, and more recently, Dr. Leroy, physician at Anvers, have insisted upon the very abundant use of cold water as a specific. Theden states that he made a most successful trial of it upon himself, and relates some cases in support of the efficacy of this method. Dr. Chevrey cites several cases establishing the fact, that the cure of the disposition to suicide, has been effected by the method of

Avenbrugger.* I have submitted to this treatment several patients who had made divers attempts to commit suicide, but with little success. In three cases, treated at the Salpêtrière, I ordered, for two of them, a seton over the right hypochondrium, and a blister for the third. I also prescribed a great quantity of water. I related above the case of a lady, in which I had caused a large seton to be inserted over the region of the liver. At Charenton, I caused blisters to be placed over the same region. Setons and blisters continued for several months, effected no amelioration.

Suicides, like all lypemaniacs, think too much. We must either prevent them from thinking, or oblige them to think differently from what they are in the habit of doing. Reasoning effects little; moral commotions are of more service. Celsus advises that individuals who entertain a desire for suicide, should go abroad; and physicians, in all times, have recommended corporeal exercises, gymnastics, riding on horseback, the cultivation of the soil, journeying, etc.

[In our author's treatment of suicide, there are two points which merit special notice and approbation. Of these one is the moral treatment, which embraces, among other things, those kind and cheering attentions which are ever welcome in whatever form affliction may come, but particularly so, when despair has taken possession of the mind. Like other useful agencies, they are recommended as adjuvants, rather than the principal means of cure. Neither argument nor sympathy, individually or united, ever yet cured a case of suicidal insanity, or ever caused a patient fully to appreciate the considerations offered for his relief, however well suited to his condition; yet the fact, that they furnish evidence that he is not quite forgotten, and that his friends do not regard his state as altogether hopeless, lessens for a brief space, the overwhelming burthen which rests upon his mind. The daily expressions of sympathy and hope, in connection with the assiduous attentions of devoted and affectionate attendants, doubtless give to the agents of a medicinal character which may be employed, a degree of efficacy which they would not otherwise manifest. The employment of tonic, in connection with narcotic and sedative agents, constituted the second point of interest in the treatment. The victims to this fearful propensity, are usually much debilitated, not only in consequence of the exhausting nature of their mental disease, but from their vigils and abstinence. They neither sleep nor eat, voluntarily. Under these circumstances, as remedial agents of special utility, are the class of remedies referred to. To the other therapeutic agents mentioned,—with the limitations and explanations offered,—no valid objection can be made, while some are of unquestionable utility. However, the great principle of treatment our author has clearly presented, in the opening sentence of this part of our subject, viz.: that the remedies employed, of whatever kind, must be administered with reference to the physical derangement, which a careful examination of the case unfolds.]

I have nothing to remark respecting the treatment which the symptoms, following attempts at suicide, may demand. Cerebral congestions, asphyxia, whether produced by immersion or strangulations, wounds, bruises, the symptoms of poisoning and the effects of abstinence, present various indications of which we cannot here speak. Persons who have a propensity to suicide, should occupy apartments on the ground floor of a building, cheerful, and pleasantly located. They should be guarded night and day by attendants, vigilant, and having experience to meet the wiles of suicides, usually exceedingly skillful in baffling the watchfulness of the most active. If it be

* *Medical Essay on Suicide.* Paris, 1816, in 4to.

necessary at any time, to have recourse to the camisole, this should not operate as a motive to security, for patients have made use of it to strangle themselves. A woman at the Salpêtrière had been fastened upon her bed, by means of this garment. During the night she threw herself from it, and her body, resting with all its weight upon the waistcoat, compressed the trachea, and the patient was asphyxiated. A patient, confined to his bed, succeeds in throwing from his couch every portion of his bedding, and is suspended and strangulated by the camisole. In public establishments, individuals who are disposed to suicide, demand the utmost attention. These patients should not be placed in isolated cells, but in public halls, where they may be better watched, both by their fellow patients, and the attendants. They should never be out of sight. It is to this attention, and to the advantage of having all the apartments of this class of patients upon the ground floor, that we are indebted, at the Salpêtrière, for having scarcely any suicides; since, among eleven or twelve hundred insane persons, of whom one hundred at least have made attempts upon their lives in the course of ten years, only four suicides have been committed; whilst, every where else, the number is far more considerable. I congratulate myself, on having first laid down a general rule for the government of suicides, even with respect to their sleeping arrangements; a precept that has not been lost in other establishments, where they have made use of it, and in which many individuals are disposed to suicide.

[In the measures suggested for the prevention of suicide is one deservedly occupying a prominent place, but which, so far as is known, has not been employed, except in individual cases, in this country. I refer to the sleeping apartments of suicidal patients, which our author recommends should be sufficiently large, to lodge comfortably *all* the patients belonging to this class. An attendant is to watch with them every night, for the purpose of preventing them, if disposed to do themselves harm. This would restrain some from making the attempt who might otherwise do so; enable the attendant to prevent injury should an attempt in any case be made, and possibly furnish to some who are impelled to this act by vague and imaginary fears, a sense of security which might result in quiet and refreshing repose. In our larger Institutions and probably in all, this, or some similar arrangement might at any time be adopted. In all cases of this sort, a ceaseless watch, secure it as we may, is the patient's principal security. There is an impulsive form of this disease, to which the principle just stated is admitted to be applicable, but which it is exceedingly difficult to apply, from the circumstance that a necessity for its exercise, is only occasionally manifested. Moreover, while the disposition is known to friends, and a degree of watchfulness regarded by them as necessary, they are sometimes unable, and perhaps as often unwilling, from not appreciating its importance, to meet the additional charge for attendance which the case may require. Hence suicides in our public institutions sometimes occur, notwithstanding the most diligent attentions of the resident officers. The night arrangement suggested above, together with a classification which will permit a constant oversight during the day of all those who are supposed to be inclined to suicide, would doubtless prove a satisfactory and economical means of effecting this important purpose.]

From the commencement of my studies on mental alienation, I was strongly impressed by the obstinacy of certain insane persons, in repulsing every variety of nourishment, and profoundly affected by the anguish which preceded their long agonies. I have already stated, that at the commencement of almost all forms of insanity, the insane refuse food; now, because it appears to them to have an unpleasant taste, in consequence of the condition of their

stomachs; now, because they think that they are provided with human flesh and even that of their children, to eat; now, they imagine that they see poison, filthy matters, pins, needles, etc., upon the food that is offered them; and finally, they believe that it is intended to poison them, although they see no poisonous substances. We must not permit ourselves to be frightened by this repugnance, as it is dissipated when the irritation of the stomach or gastric embarrassment has ceased. We combat it by immediate medication when it depends upon a change in the digestive apparatus; by the application of leeches to the epigastrium, and by means adapted to unload the bowels, or by derivatives; such as irritating pediluvia, cataplasms rendered stimulant by mustard, or even blisters to the inferior extremities.

Does the refusal to take nourishment, depend upon the moral cause of lypemania, attended with a desire for self-destruction? we must act promptly and energetically. We have recourse to persuasion, and excite the sensibility by proofs of tenderness and affection on the part of those who are dear to the sufferer. It has been reccommended,—and Pinel among others has advised it,—to strike the imagination of this class of patients, by some appearance calculated to frighten them, and to cause them to fear an evil greater than the moral one they already experience. The douche and cold baths, have sometimes overcome resistance. If all these means fail, if the refusal of food persists, if the patient has made up his mind to die of hunger, we must have recourse to the forced introduction of alimentary substances into the stomach. Several mechanical means have been devised, to force patients to open the mouth. These measures are violent, and do not always succeed. The use of a gum elastic tube, introduced through the nostrils into the œsophagus, for the purpose of conveying nutritive liquids into the stomach, ordinarily succeeds, if we have recourse to it before abstinence has given rise to inflammation of the stomach and intestines. The introduction of food after a long abstinence, would not prevent death. I first made use of the tube in these circumstances, but its employment requires precautions. The œsophagean tube, which I first employed, was of too large a calibre, and introduced with difficulty. We have since adopted an ordinary tube of a smaller calibre, as well as shorter. It sometimes happens that the extremity of the tube coils upon itself before entering the œsophagus, and then the liquid returns by the nostrils and mouth. M. Baillargé, a house pupil at Charenton, has provided the tube with a stiffener of whalebone, by which the accident of which I have just spoken, has been prevented. It may happen, that the resistance will be such, that even with much experience we shall open a false passage with the tube. This accident, though extremely grave, is very rare, for I have known it to occur but once. The tube, though introduced by a practiced and skillful hand, took a false direction, and provoked an inflammation, which terminated mortally in a few days. I repeat it, that this was the only instance in which I observed a similar accident. This method is usually unattended with danger, and has been the means of preserving the lives of numerous patients whom I have had in charge, either in public establishments, or in my private practice.

Mad'lle R., the daughter of a very nervous mother, aged twenty-five years, very tall, although rickety, having black hair and eyes, together with a very lively imagination, was on the eve of marriage, when she met the person to whom she was engaged, in company with another young lady. Both her pride and affection were most seriously wounded. She becomes agitated, flies into a rage, and is frantic with despair. A few days subsequently, she comes to the conclusion that she is forsaken. From that moment she has no desire to live, and resolves to die of hunger. Maternal tenderness cannot overcome this determination, and chagrin, insomnia, and the refusal of food, produce

great debility. Gall is called, but effects nothing in opposition to the purpose of the patient. Emaciation is extreme, and the prostration very great. I am invited to a consultation. The eyes of the patient were sunken and haggard; the cheeks of an earthy paleness; the portion over the protuberances of the cheek bones much flushed, and the skin had a dry, pungent heat. The few words which she uttered, were no longer heard; she was almost voiceless. It is decided to employ the tube, which we do, notwithstanding the resistance of the patient. We administer some weak broth, and a few spoonsful of sugared water. Emollient fomentations are placed upon the abdomen, and heat of the lower extremities is induced by cataplasms, rendered slightly stimulant by mustard, and frequently renewed. The same treatment is pursued on the succeeding days. Broth is given four times a day. On the fourth, a gelatinous bath of half an hour's duration is administered, and on the eighth, prolonged baths. The alvine dejections are less dry, more frequent, and voided with less difficulty. On the tenth day, as she resides in a very noisy street, she was able to be conveyed to a quarter, retired, and in the neighborhood of extended walks. Sleep is reëstablished, emaciation has lessened, the complexion has cleared up, the voice is more sonorous, the skin is cooler, and the pulse more developed. She is however, too weak to walk, remains sad, silent, and is unwilling to take food. After the lapse of six weeks, the baths are given but three times a week; and after two months, meat soups are substituted for vegetable broths. When the tube arrives, she places herself in an arm-chair that its introduction may be easier. It is only at the expiration of five months, after some walks, and after having recovered her vital strength and usual fulness of habit, that she begins to converse voluntarily, to eat like other people, and resumes her usual manner of living.

I might here close what I have to say upon the subject of suicide. It is, however, a malady so deplorable and frequent, it propagates itself in a manner so frightful to families and society, and suggests questions of so much importance, that I cannot refrain from saying a word upon these points. And in the first place, is suicide a criminal act which may be punished by the laws? Has the legislator the means of preventing it? Since suicide is almost always the effect of disease, it cannot be punished; the law inflicting penalties, only upon acts voluntarily committed, in the full enjoyment of reason. Now I believe that I have shown, that man only makes attempts upon his life, when in a state of delirium, and that suicides are insane persons. Fodéré is of the same opinion. In 1777, the parliament of Paris examined this question, but without deciding it. But, in view of the interest of humanity and society, can the legislator have recourse to means adapted to prevent an act, which outrages equally, natural laws, the laws of religion and of society, and which is so frequent also, that in France for example, there are annually committed, three times as many suicides as assassinations? Experience shows, that comminatory enactments have sufficed to prevent suicide. When the declamations of Agesias rendered suicide frequent in Egypt, a law of Ptolemy, which forbad any one, on pain of death, from teaching the philosophy of Zeno, put an end to this dreadful practice. When the daughters of Miletus hung themselves in emulation one of another, the senate passed a decree, that the bodies of suicides should be exposed in some public place, and the contagion ceased. The negroes who were transported to America, were accustomed to destroy themselves, in the hope of returning to Africa after death. An Englishman caused this impulse to cease, by ordering the hands of those negroes who committed suicide to be cut off, and exposed to the observation of their companions. Penal enactments were passed by certain ancient nations with a view to prevent suicide. The laws of Athens prosecuted this crime even beyond the limits of life; requiring that the hand of the offender should be

burned separately from the body. A law of the elder Tarquin, deprived of the right of sepulture, the body of any citizen, who voluntarily destroyed himself. The senate of the republic of Marseilles, which tolerated suicide, condemned him who took his own life without a legitimate cause. At an earlier period, the Roman laws favorable to suicide, annulled the testament of him, who destroyed himself, in order to escape an ignominious punishment, and forbade mourning for it. Soldiers were disgraced, if they made an attempt upon their own lives. At Thebes, the dead body of a suicide, was burnt in disgrace.

The laws of Christian countries, which condemn all murder, have pronounced self-murder to be the greatest crime, because it leaves no room for repentance. They refuse to the dead bodies of suicides, a Christian burial. All modern legislation, to which the laws of the church have served as a basis, have branded suicide with infamy. In England, the corpses of suicides were formerly thrown out into the highway. More recently, they have been interred in the country, where three roads meet. In France, during the time of St. Louis, the household goods of the suicide were confiscated for the benefit of the proprietor of the soil on which the *crime* was committed. At a later period, the dead bodies of suicides were drawn through the streets upon a hurdle. All these laws have fallen into desuetude, particularly in France. In England, they evade their application, by obtaining the certificate of a physician, who testifies that the person who has committed the act of self-murder was insane. At this day in France, and in the greater portion of Europe, they would look upon the punishment of suicide, as an act of barbarism. Beccaria opposes the penalties enacted against suicide, on the ground that they are inflicted only upon a dead body, and produce no impression upon the living; whilst, at the same time, by causing the relatives to suffer, the innocent are punished, which is unjust. If it be affirmed in opposition, says this writer, that the disgrace and penalties attending this act, and the fear of infamy, will prevent the most resolute man from the commission of it; I reply that he whom the horror of death, and the threats of eternal punishment do not restrain, will not be deterred, by considerations far less weighty.

Are not the fundamental laws of our being, and the warnings of religion, daily sacrificed to the force of prejudice, to passions and social interests? Did we not say, that the punishments inflicted upon sorcerers and the possessed, far from diminishing their number, augmented it? Will it not be the same, with respect to the penalties enacted against suicide? With reference to the former, the penalties inflicted upon sorcerers and the possessed, were enacted in accordance with a popular error. The more severe the enactments, the more thoroughly persuaded were the public of the existence of sorcerers and the possessed, of which, the laws sanctioned the belief. The number of these deluded people began to lessen, so soon as they ceased to believe in the existence of sorcerers, and to fortify the public mind in this belief, by the zeal which was manifested, not in destroying error, but in punishing it.

Popular opinion is not favorable to suicide, nor is it exercised with a view to combat an error, but to prevent an act, whatever, aside from this, its moral or legal character may be. Argument merely, should not prevail against the authority of experience. Comminatory laws caused suicides to cease in Egypt, Miletus and America. Suicide is more frequent, since the laws which condemn it, have lost their force. Hence, for the welfare of society, the legislature should establish laws, not attaching penalties to the dead body of the suicide, and still less against his relatives; but with a view to prevent the commission of suicide. It does not belong to me to say what these laws shall be, but, in my opinion, they should vary to suit the dispositions, morals, and even the prejudices of the people inhabiting different countries; and should be designed

to meet the social causes, which are calculated to develope a tendency to suicide. For example, in our day, the king of Saxony has enacted a law, that the bodies of suicides, should be placed in public amphitheatres for dissection.

Until wise legislation apply some remedy to this social evil, the friends of humanity should desire that education may repose upon the solid basis of moral and religious principles. They should protest against the publication of works which inspire a contempt for life, and laud the advantages connected with a voluntary death. They should point out to the government, the dangers which result from making public the infirmities to which man is exposed. They should loudly demand, that the journals be forbidden to publish suicides, and from relating the motives and trifling circumstances connected with the commission of the act. These frequent accounts familiarize the mind to the idea of death, and cause it to be regarded with indifference. The examples daily presented for imitation, are contagious and fatal; and that person, who is now harassed by reverses or vexations, would not have destroyed himself had he not read in a journal, the history of the suicide of a friend or an acquaintance. The freedom of the press should not prevail over the true interests of humanity.

When speaking of the particular causes of suicide, I demonstrated that the present age was fruitful in causes adapted to produce it.* As when in times of ignorance, and at periods when religious discussions prevail, and religious monomania abounds, we meet with magicians, sorcerers and the possessed; so suicides prevail, when the excesses of civilization threaten the destruction of empires. During the prosperous periods of the Roman Republic, suicide was rare. But it became frequent, when the philosophy of the stoics found partisans in the patrician order; when two soothsayers could no longer regard each other without a smile; when luxury and wealth had corrupted the morals of the people; and political agitations had shaken the Republic to its centre.

The same has been true in England, since Richard Smith, and particularly Mordan, set an example which became contagious. Moreover, since the writings of Donne, Blount and Gildon have found readers; since certain philosophers in France have revived and given credit to the doctrine of Zeno; since certain others have taken up the defence of self-murder; and revolutions have given a new impulse to all the passions, suicide has become more frequent. Under all these circumstances, the natural motives which inspire a horror of death, and especially of self-murder, are not strengthened by considerations drawn from morals, religion and the laws. If suicide is constantly represented in books and upon the stage, not merely as an indifferent act, but as one indicative of courage, from which men the most grave, and often the most eminent in society do not recoil; the public mind will doubtless be more disposed to suicide; and this disposition will be fortified by the force of imitation, if examples are daily presented in the public prints. But from the circumstance that suicide is more frequent in our times, I shall not conclude with Doctor Burrows, however great may be my esteem for this physician and his writings, that the number of the insane has increased in France. Doctor Burrows† complains of the fact, that Lorry pretends that melancholy is endemic in England. He accuses those foreigners of injustice, who affirm that there is more insanity in England than elsewhere, and also accuses Montesquieu of having given authority to this prejudice. But Doct. Burrows should accuse English historians, and particularly Smollet and I. Delarrey, who deno-

* See also, *Considerations on the Suicides of our Epoch*, by Doctor Brouc. (*Annals of Public Hygiene*, 1836, t. xvi, page 224.)

† *An Inquiry into certain Errors relative to Insanity*, London, 1820, in 8vo. *Commentaries on the Causes, Symptoms and Treatment of Insanity*, London, 1828, in 8vo.

minate England the natal soil of suicide. He should take to task, those English physicians who assure us, that the insane are more numerous in their country, than upon the continent. Was not this truth loudly proclaimed in the British parliament in 1815?

See how M. Burrows reasons, to prove that insanity is more frequent in France than in England. "It is at this day generally admitted, that suicide is a mental disease. If suicide is most frequent in a city, mental alienation is most frequent there. London presents far more numerous points of resemblance to Paris, than any other city. The mortality of London is much greater than that of the whole department of the Seine, which embraces Paris: it being as 10 to 7. The number of suicides found in the tables of mortality at London, averages about 40 a year. It is true that those who have made way with themselves are declared insane, and are enrolled as such on the bills of mortality. It is moreover true, that it is difficult to decide, as to whether death is, or is not voluntary, on the part of all those who, having destroyed themselves, are found drowned. But supposing, continues the author, that the number of persons who voluntarily destroy themselves, and who have been declared insane, may be 120. Supposing moreover, that there may be 40 upon whose cases no judgment is passed, the total number of voluntary suicides in London is 200, whilst the mean number of suicides at Paris, is 300 a year. Therefore the number of suicides in London, is to that at Paris, as 2 to 3. But suicides are insane persons. Therefore there are one third more insane persons in the department of the Seine than at London, and therefore, mental alienation is more frequent in France than in England."

I will in the first place remark, that Doct. Burrows makes up the number of 200 suicides at London, only by means of a series of suppositions; and that he embraces in this amount only those cases of suicide *supposed* to be voluntary; whilst in the Paris reports, are embraced not only those who have destroyed themselves, whether voluntarily or not; but also those who have been found dead by the police, without its being always possible to determine whether they have committed self-murder, have been assassinated, or have come to their end by some accidental means. M. Burrows assures us, that more persons drown themselves at Paris than London, although accidents of this nature ought to be more frequent in the latter city, in consequence of the activity of its business on the river. I am not able to verify this fact; but I suspect, that if it is established by the reports of the public registers, this difference is owing in part to this circumstance; that the Thames carries all the dead bodies into the sea, whilst those which the Seine contains, are arrested by the nets at St. Cloud, and carried to the Dead House; and in part, to the solicitude of the English to inter the dead, which causes them to reclaim those who have been found in the water, and to state the proof of the death in the parish registers. This author assures us, that in 1817, there were at Paris many more suicides than at London. This proves at most, as we have elsewhere stated, and as we have just repeated, that there are years, in which suicides are more frequent than usual, since we have known it to prevail epidemically, in different countries. But to desire to establish it as a mean, because the number of suicides at Paris in 1817, amounted to 300, would be strangely to deceive ourselves. I have elsewhere expressed the reasons which render me suspicious of the fidelity and exactness of the reports drawn up from the public registers.

M. Balbi, in a table, comparative of France with the principal states of the globe, establishes the number of suicides, relative to the population, in the following proportions.*

**The French Monarchy compared with the Principal States of the Globe.* Sheet in Fol.

France, (1827)	1	suicide to	20,740	inhabitants.
Prussia,	"	"	14,404	"
Austria,	"	"	49,182	"
New York	"	"	7,797	"
Boston,	"	"	12,500	"
Baltimore,	"	"	13,656	"
Philadelphia,		"	15,875	"

Doctor Casper, who has published the result of very extensive researches on the subject of suicide, has somewhat altered the proportions, by comparing the number of suicides with the population.*

Copenhagen,	100	suicides to	1,000	inhabitants.
Paris,	49	"	2,040	"
Hamburg,	45	"	2,222	"
Berlin,	34	"	2,741	"
London,	20	"	5,000	"
Elberfeld,	20	"	5,000	"

The increase of suicides within the last half century, has been frightful. At Berlin, from 1788 to 1797, sixty-two suicides, according to Doct. Casper, took place; and from 1813 to 1822, the number of suicides increased to 544. In Paris from 1817 to 1821, the number of suicides amounted on an average, to 346, and in 1834 there were 574. We should doubtless take into view the increase of the population, and the care that is taken, to ascertain with exactness whatever relates to this subject; but we cannot conceal the fact, that this increase in the number of suicides, reveals a remarkable change in society. The general returns of the criminal courts in France, present from the year 1827 to 1831 inclusive, an average of 1808 suicides, legally made up from the whole kingdom. Those suicides that have not been announced to the authority, are not embraced in this estimate. Notwithstanding, suicides are thrice as numerous in France, as homicides. In Berlin, suicides are to murders or homicides, as 1 to 5!

M. Quételet, in his work replete with the most valuable researches and deductions, respecting the development of the faculties of man,† assures us that in the department of the Seine, the mean number of suicides is 350, out of 800,000 inhabitants; that is, one suicide to 3,000 of the population; a proportion far less than that which had been pointed out by Doctor Casper.

If we compare the data published by this physician, with the results to which M. Quételet has arrived, we shall observe a very remarkable difference as it respects suicide, between Paris and Berlin. The number of suicides is much more considerable at Berlin than at Paris. It is as 20 to 12 according to M. Balbi, and as 20 to 29, according to Casper. At Berlin the number of suicides among men, is to that among women, as 5 to 1, whilst at Paris, the difference is as 3 to 1. At Paris, strangulation as a means of suicide, occurs in one case in ten, whilst it amounts to one half in Berlin. Fire-arms are employed in 1 case in 7 at Paris, and 1 in 3 at Berlin; whilst submersion embraces a little more than one third at Paris, and one eighth at Berlin. Upon what do differences so remarkable, depend? Are the localities or morals of these places, concerned in effecting them?

M. Guerry, an advocate of the Royal Court at Paris, in consequence of

* Beitrage zur Medicin Statistik und Staats arzneizunde, Berlin, 1825, in 8vo.

† *On Man, and the Development of his Faculties; or an Essay on Social Physics.* Paris, 1835, 2 Vols. in 8vo.

being placed in peculiar circumstances, was led to make some very extended researches on the subject of suicides. Those portions already published, have produced an intense desire that the author may complete this work.* M. Guerry has concluded, from his statistical data, that in the north of France,—divided by him into five regions,—there are 51 suicides, whilst there are 11 in the south, and 9 in the central portion: that in the north, the number of suicides, in proportion to the population, is as 1 to 9,855, and in the south as 1 to 30,875; that the department of the Seine produces one sixteenth of the suicides that are committed throughout all France; that the number of suicides increases progressively, in proportion as we approach the Capital, and that a like progression takes place with reference to Marseilles, relative to the departments which surround that city. M. Guerry has also shown, that summer produces more suicides than autumn, as I also stated, when speaking of the influence of the seasons on the production of suicides; that the greater number of suicides are committed from four to six o'clock, and the least, from two to four in the morning; that age has an influence upon the choice of the means employed by suicides, etc. It has not been demonstrated, that suicides are more frequent in France than in England; but were this established by incontestable facts, it would not prove, that the insane are more numerous with us, than in England.

If the number of suicides be greater at this day in France, several forms of mental alienation have almost entirely disappeared: for example, religious insanity, which is still very prevalent in England. The acts of the British Parliament attest, that in 1815 there were 7000 insane persons in London and its environs; whilst there were never in the department of the Seine, whither there is an influx from all the provinces, a number amounting to thirty-five hundred.

* *An Essay on the Moral Statistics of France*, Paris, 1833, in 4to.

MONOMANIA.

Distinctive characteristics of monomania and lypemania.—Intellectual monomania.—Reasoning mania of authors, affective monomania of Esquirol.—Monomania without delirium, or instinctive monomania.—The physiognomy and leading mental qualities of the monomaniac and lypemaniac described and contrasted.—Course of monomania more acute, and its termination usually more favorable than lypemania.—Theomaniacs.—Melancholica enthusiastica.—Delusions of monomaniacs.—Case in detail, with post-mortem examination.—Case in which hypochondria first, then lypemania, and lastly monomania were successively developed.—Cases illustrating certain mental peculiarities.—Case of Mad'e de R., with post-mortem examination.—Monomania sometimes epidemic.—*A modern example.*—Predisposing and exciting causes.—Remittent or intermittent.—Progress sometimes rapid and violent.—Terminates suddenly and unexpectedly.—Sometimes passes into mania, or alternates with lypemania.—When prolonged, degenerates into dementia.—Intermediate state.—General treatment.—*Farther remarks on treatment.*—EROTIC MONOMANIA.—Erotomania defined.—Distinguished from nymphomania and satyriasis.—Case illustrating the uncomplicated characteristics of erotic delirium, with treatment.—Mode of detecting it in its earliest stage.—Cases illustrative of its sudden and fatal termination.—Suicide one of its terminations.—Amorous lypemania complicated with mania.—Examples.—Erotomania may degenerate.—Cannot be confounded with hysterical madness.—Has existed among all people.—Causes of erotomania the same with monomania in general.—Is the cerebrum or cerebellum the part affected in erotomania?—In some cases, marriage almost the only remedy.—REASONING MONOMANIA.—General description, succeeded by numerous examples.—Has an acute and chronic course.—Three periods recognized in it.—Remittent or intermittent.—No therapeutic indication different from what is found applicable in other forms of monomania.—Peculiar management of the mind requisite.—Reasons offered for studying it with care.—MONOMANIA FROM DRUNKENNESS.—Fermented drinks common to all people.—Use and abuse.—Their effects.—Intemperance sometimes hereditary.—Sometimes produced at the critical period in women.—Examples.—Cologne water preferred in some cases to other stimuli.—Paroxysmal.—Reasons assigned for the formation of this habit.—Tonics proposed for some cases, oil of turpentine for others.—INCENDIARY MONOMANIA.—(Pyromania of Marc).—Causes which lead to it.—Examples.—An instinctive impulse independent of the will sometimes leads to incendiarism.—Inferences from foregoing cases.—Farther remarks, with respect to causes.—Relative proportion of male and female incendiaries.—Hygienic influences relating to sexual development in France and Germany described.—Enquiries respecting the age and sex of incendia-

ries.—Homicidal monomania.—Synonyms.—Causes which lead to it.—Mania without delirium.—Maniacal fury.—Further exciting causes.—Examples.—All periods of life subject to attacks.—Usually periodical.—Treatment like that of other forms of monomania.—Cases, with treatment and observations.—Cases of three little girls, with remarks.

After having set forth the characteristics of lypemania, (melancholy with delirium), it becomes my duty to describe that form of partial delirium, to which I have given the name of monomania; but first, I will endeavor to point out the distinctive characteristics of those two forms of delirium. Monomania and lypemania, are chronic cerebral affections, unattended by fever, and characterized by a partial lesion of the intelligence, affections or will. At one time, the intellectual disorder is confined to a single object, or a limited number of objects. The patients seize upon a false principle, which they pursue without deviating from logical reasonings, and from which they deduce legitimate consequences, which modify their affections, and the acts of their will. Aside from this partial delirium, they think, reason and act, like other men. Illusions, hallucinations, vicious associations of ideas, false and strange convictions, are the basis of this delirium, which I would denominate, *intellectual monomania.* At another; monomaniacs are not deprived of the use of their reason, but their affections and dispositions are perverted. By plausible motives, by very reasonable explanations, they justify the actual condition of their sentiments, and excuse the strangeness and inconsistency of their conduct. It is this, which authors have called *reasoning mania*, but which I would name *affective* monomania.

In a third class of cases, a lesion of the will exists. The patient is drawn away from his accustomed course, to the commission of acts, to which neither reason nor sentiment determine, which conscience rebukes, and which the will has no longer the power to restrain. The actions are involuntary, instinctive, irresistible. This is *monomania without delirium*, or, *instinctive monomania.*

Such are the general phenomena, which partial delirium or monomania, presents. But according as the delirium is expansive or concentrated, gay or sorrowful, there exist differences, which it is necessary to notice. In lypemania, the sensibility is painfully excited or disturbed; the sorrowful and depressing passions modify the intelligence and the will. The lypemaniac fastens upon himself all his thoughts, all his affections; is egotistical, and lives *within* himself. In monomania on the contrary, the sensibility is agreeably excited. The gay and expansive passions react upon the understanding and the will. The monomaniac lives *without* himself, and diffuses among others the excess of his emotions. The physiognomy of the monomaniac is animated, changeful, pleasant: the eyes are lively and brilliant. The complexion of the lypemaniac is sallow, pale, and even bronzed; the features of the face are contracted, changeless and shriveled; the eyes are sunken, and fixed; the look is uneasy and suspicious.

The monomaniac is gay, petulant, rash, audacious. The lypemaniac is sorrowful, calm, diffident, fearful. The former exercises much, is talkative, blustering, pertinacious, and easily irritated: nothing would appear to oppose the free exercise of all his functions. The latter opposes every movement, dissembles, excuses or accu ses himself; the functions are accomplished painfully and with slowness. The course of monomania is more acute, its duration shorter, and its termination more favorable, unless there are complications. The contrary holds true in lypemania. In this, the delirium seems to depend more particularly upon some abdominal lesion; while in the other, it appears to be caused more immediately, by the anormal condition of the brain. Such

are the essential differences between lypemania and monomania; so clearly pointed out, that we need not confound these two pathological conditions, nor impose upon them the same name, if we desire precision in medical language. It is in consequence of not having distinguished these two maladies, that authors have noticed only the intellectual disorders, and neglected the other symptoms. They have not observed the difference between monomania and mania, because of the excitement, susceptibility and fury of some monomaniacs. They have confounded monomania with melancholy, because that in both one and the other, the delirium is fixed and partial. They deny that there are monomaniacs. There are not, say they, insane persons, whose reason is sound except on a single subject. These patients always offer some disorder of sentiment and will. But if it were not thus, monomaniacs would not be insane. I would ask, if maniacs always reason incorrectly, and upon every variety of subject; if all their intellectual faculties are invariably perverted? M. Foville, in his excellent article on *Mental Alienation* in the *Dictionary of Practical Medicine and Surgery;* says that he has seen but two or three monomaniacs, either at the Salpêtrière or St. Yon (Rouen). Was it because he found no difference between the insane man who believed himself a King, Grand Seignior, inspired of Heaven, prophet; and he who, at the same time, has illusions, hallucinations, imperfectly distinguishes the qualities and relations of external objects, is unpleasantly affected by whatever impresses him, confounds times, places, things and persons; is, in fine, the sport of his perverted faculties? Shall we adopt the same therapeutic views, in the treatment of those insane persons who are a prey to a delirium so varied in form? In the above cases, shall the intellectual and moral hygienic treatment be the same?

M. Foville enquires, if the different forms of delirium which we call mania and monomania, may not be the expression, proper to the character of those persons respectively, who are thus affected? If it is thus, concludes this author, the limits and extent of the delirium are of little importance. Partial delirium is a phenomenon so remarkable, that the more we observe it, the more are we astonished, that a man who feels, reasons and acts, like the rest of the world, should feel, reason and act no more like other men, upon a single point? Can monomania without delirium, the reasoning monomania of authors, be confounded with mania? In this, the understanding is overthrown. In the other, it is sound, intact, and sometimes even more active and clear than natural. In mania, the whole intellectual and moral being is perverted, all the actions are disordered; while in monomania, the perversion with respect to the acts, is partial and limited, like the wandering of the reason. But, says Dr. Prichard,* the word monomania, applied to moral and instinctive insanity, without lesion of the reasoning powers, does not correspond, in our acceptation of it, with the word mania, which presents to the mind the idea of intellectual disorder. But in the *moral insanity* of this author, in the *reasoning mania* of Pinel, in *mania without delirium*, the understanding is more or less affected. Were it not thus, the insane would permit themselves to be controlled by their understanding, and would discover that their views are false, and their actions, unusual and strange. Their understanding is more or less at fault; it has lost its influence over the will, and is no longer in harmony with the other faculties. Among the insane, who, without motive, are drawn away instinctively to the commission of reprehensible acts, which would be criminal if they enjoyed the use of their reason, intellectual action is suspended. In these cases, there is strictly a lesion of the understanding; but this is not the controling cause of their acts. There is hence, delirium, insanity, monomania. I shall be pardoned for this long discussion, on what I un-

* Treatise on Insanity and other disorders affecting the Mind. London, 1835, in 8vo.

derstand by the word monomania, if my reader will call to mind, that Paschal recommends the employment of no term, of which we cannot give a clear and distinct definition. M. Laromiguière* is equally explicit, *on the necessity of obtaining exact ideas, and appreciating the value of words.*

Among monomaniacs, the passions are gay and expansive. Enjoying a sense of perfect health, of augmented muscular power, and of a general well-being, this class of patients seize upon the cheerful side of every thing. Satisfied with themselves, they are content with others. They are happy, joyous and communicative. They sing, laugh, dance. Controled by pride, vanity and self-love, they delight in their vain-glorious convictions, in their thoughts of grandeur, power and wealth. They are active, petulant, inexhaustible in their loquacity, and speaking constantly of their felicity. They are susceptible and irritable. Their impressions are vivid, their affections energetic, their determinations violent. Disliking opposition and constraint, they easily become angry, and even furious. Among monomaniacs, some believe themselves to be gods; pretend to be in communication with heaven; assure us that they have a divine mission; and present themselves as prophets and soothsayers. We call them *theomaniacs*. Plato admitted a form of insanity produced by inspiration, and regarded it as a gift of the gods. The divine breath animated both prophetesses and sibyls, and inspired them with a knowledge of the future. Areteus and Cœlius-Aurelianus also admitted a holy delirium. The monomania of enthusiasm (melancholica enthusiastica) of Paul d'Egine, belongs to the same variety of delirium. This class of monomaniacs think themselves excited, agitated and enlightened, by a supernatural power. From ancient times, enthusiasts and inspired persons have not been wanting. Paracelsus believed that he carried his familiar in the hilt of his sword. The enthusiasts of the Cevennes believed in the declarations of some who pretended to be inspired, who boasted of their power to predict future events, and of being acquainted with the profoundest mysteries. Those persons had convulsions. We have seen at different times, men making similar pretensions seduce persons, by no means prepossessed in their favor, and least susceptible of vain credulity. Examples of a like error are not rare. The individuals of whom historians speak, are either theomaniacs, rogues, or the agents of some adroit intriguer. The insane man of the Pyreus, who has so often been cited as an example; and that other demented person, who entered the theatre, and applauded as if the play had been going on, were also monomaniacs. Fodéré gives an account of a porter thirty-five years of age, who persuaded himself, that in consequence of the peace with England, coffers full of gold and silver had arrived for him from America. So strong was this persuasion, that he refused longer to labor in his vocation. We had at the Salpêtrière, a girl who had received some instruction, and who believed that she controled the sun, moon and clouds. Uneasy at her sojourn in the hospital, she threatened us; now with rain, and now, with some painful solar influence. I have seen at the same hospital many women, who thought themselves empresses, etc. Some monomaniacs consider themselves kings, princes and lords; wish to command the world, and give, with dignity and condescension, their commands to those around them. Others consider themselves savans, distinguished by their discoveries and inventions; poets and orators, whose verses and orations it is necessary to listen to, on pain of their displeasure. Others still, rolling in wealth, distribute their favors and fortunes among all those whom they meet. There are those who, under the influence of the passion of love, are constantly engaged in matters pertaining to it; flatter themselves with the merest illusions, and think that their dwelling place is among sylphs and houris.

* Discourses on Philosophy.

M. de R., 63 years of age, tall, of a strong constitution, and sanguine temperament, endowed with much intelligence, which had been improved by a good education, was curate of a parish of Paris. When about 50 years of age, he experienced long, but trifling difficulties. He troubled himself much on account of them, had pains in the head, and became slightly deaf. Some time after, at the termination of an absorbing discussion, reason wandered; but four months of treatment sufficed to effect a cure. The deafness however, still increased. He returned to the discharge of his duties, and continued to enjoy good health for two years. He then experienced a new trouble. Insomnia became urgent; the pains in the head were severe and almost constant; and the deafness was complete. Some days after, the patient had hallucinations of hearing, and from that time he hears voices which justify his conduct, and condemn those who are opposed to it. When committed to my care, he believed himself in communication with God and angels, who conversed with him both night and day. He is impatient, and commands with pride, and in the name of God. He no longer reads his breviary, and renounces the most common practices of religion. If he speaks, the voice of an angel informs him beforehand, what he shall utter. If he reads, the same voice is heard, before he pronounces the words, and if he writes, voices dictate to him. He is but the echo of what he hears, whether he speaks or writes. He is constantly demanding his liberty; calling for clothing or an improved diet. If refused, he repeats many times in succession; *in the name of God, you are accursed.* God, by my mouth commands you. If you obey not, I pronounce you accursed. Do they persist in their refusal, M. de R. writes; you are a heretic, a perverse person; God will condemn you. If they laugh at his threats, he becomes irritated, his figure is animated, his eyes gleam, and in a transport of passion he exclaims, Accursed! accursed! or retiring, in a rage, he says; Accursed, you are condemned! When admitted at Charenton in 1831, his condition remained the same. He is inoffensive, goes and comes to the house, reiterates his demands, complaints, threats and curses, but is not habitually sorrowful. He often visits the house of one of the officers, whom he anathematizes as well as the others; although he often plays with him, and has presented him a volume, in prose and verse, written since he became an inmate of the establishment. This volume, and a second which he gave to Dr. Calmeil, are remarkable for their justness and coherence of thought, and energy of expression. Nothing is altered in the writing, which is very neat and correct. In 1832, he is seized with chronic catarrh, and his health becomes enfeebled. He often complains of dyspnœa; his limbs swell; and at length he dies suddenly, Oct. 15th, 1833, after an attack of pulmonary hemorrhage.

At an examination, made twenty-four hours after death, nothing remarkable was noticed externally. The mouth is still full of blood. The bones of the cranium are thin; its antero-posterior diameter six inches, and the transverse five and a half. The dura-mater is of a violet color externally, and of an unnatural thickness. There was separated from it a rough, false membrane, one line in thickness, and composed of several plates or folds. The dura-mater thus exposed, is healthy, and still covered with the arachnoid tunic. The other face of the false membrane, in contact with the arachnoid, is reddened in plates, and a fine membrane is separated from it, which is the seat of the injection, which extends over nearly the whole surface of the meninges, except above the orbits. The false membrane extends over the whole convexity of the brain, where it presents the greatest thickness; from whence it extends on either side, becoming more and more thin, as it proceeds to the base of the cranium. The injection seems to be confined to the sub-arachnoid cellular tissue. But the extremely thin membrane, which is the seat of injection, may be removed; for the arachnoidean plate, when washed, presents no longer red-

ness, while the cerebral plate of the same membrane is healthy. The pia-mater is injected, red, and easily removed. Its numerous convolutions present on their surface, little points of blood. The grey substance is not colored, but is here and there of a yellow hue. The white substance is injected, but there is no serum in the ventricles. Nothing anormal is noticed in the remainder of the cerebro-spinal system. The two lungs contain at their summits, and the right throughout the greater portion of the superior lobe, a mass of tubercular matter, and presents small caverns, filled with a softened tubercular deposit. The remaining portions of the two lungs are engorged with blood, still contained in its vessels. The bronchiæ are filled with frothy, red blood, similar to that which is vomited before death. The heart is small and its substance firm; its cavities are small, and its walls thick.

M., thirty-six years of age, is tall, of a bilious-sanguine temperament, with black hair and eyes. The features of his countenance are distinctly marked. He has a cousin-german on the mother's side, who is insane. In infancy, his health was feeble; but became firm at puberty. In disposition, he is obstinate and proud. Becoming his own master at an early period, he traveled much, and led a very dissipated and irregular life. At twenty years of age, he endeavored to recover by speculations, his fortune, which the revolution had destroyed. At the age of twenty-seven years, he was married to a beautiful woman, both amiable and wealthy. He gave himself up, with more vigor than ever to business, and with all the fire of his ambition. At the same time, he is jealous. During the second year of his marriage, tumors appear upon his body, which are more distinct in the following. He employs, and every where enquires for remedies; thinks much about his health, respecting which he is more troubled in winter, than summer. He is, in a word, a hypochondriac. Notwithstanding vicissitudes in business, his fortune increased. In 1815, he stakes it all in the public funds, and in a single day is ruined. From that moment, a change in his character is perceptible. He is quarrelsome, too exacting, overbearing, uneasy, restless, and unjust towards his relatives, whom he accuses of not coming to his support. He ceases not to complain of them, notwithstanding their many proofs of regard. When thirty-six years of age, two years after his reverse of fortune, he became gloomy and thoughtful. He attributes his indisposition, to derangement of the nervous system and stomach. Shortly after, he conceived an opinion, that the food at the eating house at which he was accustomed to dine, had been poisoned. He indulged in violent fits of passion against his father-in-law, who lavished upon him every attention, but refused to commit to his keeping the funds as he had once before done. He quarreled with his wife, notwithstanding the affection she entertained for him. He visits the houses of his acquaintances and friends, complaining that he is poisoned in the family of his father-in-law, but immediately makes the same complaint, when living with them. Often, after his repasts, he goes abroad for milk to drink; and not unfrequently, after water for his own use.

After a month of inquietude, agitation and domestic quarrels, provoked by his unjust suspicions and reproaches, he demands a passport, wishing to leave France. Some days after, he throws himself into the hands of the police, lodges an accusation against his father-in-law, and accuses his wife of exercising an undue influence over him. It was under these circumstances that the patient was committed to my care, December 30th, 1817. He walks at a rapid pace, eats little, and his bowels are constipated. He is impatient, replies hastily, and with pride. However, after several interviews, I began to obtain his confidence, and convinced him of the falsity of his peculiar notions. He appeared well from the sixteenth day, but is exceedingly anxious to recover his liberty and visit his wife. I promised that he should see her shortly, and that, if he continued rational, he should return to his family in eight days.

This positive assurance, together with the expectation of once more seeing his wife and children, seemed to put an end to his fears and absurd prejudices. Nevertheless, three days before leaving me, he persuades himself that, during the night, we had sprinkled ashes about his chamber. This hallucination awakens his apprehension, but he conceals it carefully, and restrains himself, in order once more to visit his wife and father-in-law. That he might not betray himself, he returns to his own house. The same day however, he manifests uneasiness while at dinner; repels whatever is said to undeceive him, and refuses all advice, attentions and remedies. On the following days he overheats himself in running, and expresses a desire to assume the management of his affairs. At the expiration of a month, he appeared more agitated and troubled; the alarms of his family increase; and at length, on going out of a coffee house, where he had been reading a journal, in which there was a question respecting the *pretended dauphin*, he at once conceives the idea that he is himself the son of Louis XVI; presents himself at the Tuileries, and penetrates even to the apartments of the king, in order to claim his rights. He is arrested, replies with composure, politeness and dignity, to the officer who interrogates him, and allows himself to be conducted home, without resistance or complaint.

Committed anew to my care, Feb. 20th, 1818, he presented during his stay, the following symptoms. His physiognomy is changeful, his eyes red and projecting, and his step haughty. He is polite towards all, familiar with none. He protests that he is not sick; that he is the dauphin; that his arrest is arbitrary; and that he will one day have revenge; often and loudly renewing his protestation. His confidence is sometimes shaken, but a moment after, his conviction is entire; and he abandons himself to all the errors it suggests. He issues proclamations to the French people, is in constant activity, endeavors to escape, and reviles the minister of police, who prevents him from fulfilling his high destiny. Nevertheless, he devotes himself, from time to time, to poetry and painting. His various productions, written with the greatest facility, want neither force nor beauty. When ridiculed on the subject of his delirium, he becomes irritated, or speedily retires, without uttering a word. He sleeps little, and is troubled with constipation. Sometimes he eats only bread, persuaded that poisons are mingled with his other aliments. Laxative drinks, tepid baths, leeches frequently applied to the anus, isolation, frequent and friendly conversations, reading and walking, are the means employed for his relief. After many months, a long journey into Germany is recommended, and undertaken without success. I cannot close this account without remarking, that from being a hypochondriac at first, then a lypemaniac, fearing prison, he became a monomaniac, immediately after reading the journal. That sufficed to produce a permanent impression. He believed himself the dauphin of France.

With what coherency of reasoning the patient seeks to persuade others of the correctness of this acquired conviction, the following will show: It is the patient who speaks. "My pretended father was attached to the Tuileries (this is true). On the tenth of August, when I was eight years of age, my pretended father preserved me from a brawl; took me through the Tuileries; caused me to go out by the Pont-Tournant, and placed me at a house in the rue Royale. My education I owe to him. He died. When Bonaparte was proclaimed Emperor, I was presented, by his order, with a seal which was that of the family of the Bourbons, and which had been taken from me on the tenth of August, before my removal from the Tuileries. In 1814, M. D. S., who called himself my uncle, went with M. Talleyrand before Louis XVIII, that he might recognize me. In a long conference which was held at Saint-Ouen, it was decided, lest the public tranquillity should be compromised, and to prevent collisions, that Louis XVIII. should reign. They were oblig-

ed to deny, though they could not fail to know me; for in every feature I resembled Louis XVI."

The following case presents to our notice a monomaniac, harassed by imaginary terrors, which lead him to the commission of an act of fury, and which passes into monomania, whose prominent characteristic is, pride or vanity. During his whole life, this patient had been foolishly vain, and a prey to fear. M., thirty years of age, of a strong constitution, and a very lively, cheerful disposition, has never been controlled from earliest infancy. He is very sensitive to any want of attention which may be his due in society, and has an ambition to pass for a very important personage. He is fond of violent exercises, such as the chase, and martial engagements; and is mortified when he cannot make a display of luxury and splendor. His mother, when pregnant, experienced a serious fright; and when six months old, he was operated upon, for a fistula in ano. From birth until his fifth year, he was subject to convulsions; and at six years of age, suffered from an acute cerebral affection, which was cured at the expiration of ten days. When twelve years old, an inguinal hernia made its appearance. He suffered subsequently, from a herpetic affection, and a quinsy attended with delirium. During his infancy, he was exposed to causes of fright; living at that time amidst the scenes of la Vendée. Since this period, he has always suffered from panic terrors. Arbitrary and violent acts, to which he was subjected during seasons of trouble, contributed to strengthen his tendency to fear. However, his constitution became more robust at the period of puberty. After being fatigued by reading, and even during the night, he is seized with a passion for study, and at the same time persuades himself that his enemies are about to make an attempt upon his life. Already does he experience the future effects of the poison. He fears all who approach him, excepting his relatives, who are condemned to submit to the same destiny with himself. He thinks that he both sees and hears, persons armed with poniards and air-guns, which have been given them for the purpose of destroying him. Does he walk in the gardens, he immediately returns; saying that a ball had just whistled by his ears. Sometimes he indulges in immoderate laughter, and when asked the cause of it, he replies that he hears sounds, from which he forms words, that excite his mirth. He endeavors to persuade those persons who are about him, that they ought to hear the same sounds that he does. He is apprehensive that he is regarded as a madman. He constantly hears the cry of; *madman; madman.* He frequently enquires of his friends, if his eyes are not fixed or haggard. Often, after eating, he is irrational, and suffers from oppression.

While at an inn, in D., a barber, who was about to shave him, stoops down to pick up something. Without any previous altercation, M. fires a pistol at him, and fractures his arm. It was perfectly apparent, that he regarded this unfortunate man as an assassin. In consequence of this attack of fury, he remains for five days without eating, drinking or sleeping. At the expiration of this period, sleep is again reëstablished, and M. is more rational and composed. He also eats, but his fears never desert him. When committed to my care, I observe that the physiognomy of the patient is extremely changeful and animated; his step proud and haughty. During the first days, he refuses every variety of aliment, and is unwilling to be shaved. He does not sleep, and constipation is obstinate, notwithstanding the employment of prolonged tepid baths. As it respects genius, he professes to be the first man in the world; and attempts are made to take his life, through fear that he will control the world. He is Apollo, and Cæsar. By this double title it is, that he expects and requires that all should obey him. It is shameful, that the highest order of mind should be confounded with insanity. He writes to all those occupying the most exalted stations; even the king himself. He is constantly expecting orders, which will restore him to freedom, and threatens me

with the full weight of his authority, so soon as he shall be set at liberty. Meanwhile, he demands an advocate and bailiff. He alone is master; no one has authority over him. He replies with disdain, and often not at all, to questions that are put to him. It is impossible to persuade him, that he is the sport of his disordered imagination, and that his condition requires the aid of medicine. We wish, he says, to make him lose his reason, by the use of remedies, but his mind is too strong, and we shall not succeed. Mildness and persuasion are of no avail. Do we wish him to take a bath, or to apply a blister to one of his limbs; it is necessary to employ a great array of force, in order to effect our purpose. When his mind is divested of his fears, he converses with propriety, is amiable, plays at different games, and no disturbance of his reason is apparent. The functions of *organic life*, offer no disorder.

M. H., forty-five years of age, a bachelor, and counsellor-at-law, is of a medium stature, bilious-sanguine temperament, of an excellent constitution, and has a remarkably voluminous head. His forehead is uncovered to a very considerable extent, his hair black, his eyes full of vivacity, and his complexion swarthy. He has always led a regular life, and conducted his affairs with system and integrity. He resided for some time at Guadeloupe, was sick for a year after a struggle with the climate, in connection with reverses of fortune, was sent back to Paris, and admitted at Charenton, Nov. 20th, 1832. During the first months of his sojourn at this establishment, he appears composed, walking in the garden, reading much, and conversing with spirit. He would have been regarded as rational, if, from time to time, his delirium did not make itself manifest. He called himself the son of Louis XVI, and was accustomed to add, that an attempt had been made to poison him, for a political purpose. After some months, the delirium manifests itself more habitually, and at length reaches a state of fury. He is king, and as such, expects to command and to be obeyed. Those who surround him are his slaves, and their right to life and death is vested in him. Wo to the man who accosts him, without recognizing his kingly power. A doubt on this point, is high treason. The domestics who serve him, know full well the precautions which it is necessary to take, in presenting themselves to him. In several instances, his threats and transports of passion, on my endeavoring to combat his error, have put me on my guard.

In his case, every circumstance comports with his conviction. His lofty carriage, his attitude and look; the imperious tone of his voice and gestures, most clearly express the vain prejudices that occupy his mind. He does not adorn himself with the insignia of his rank, and with ribbons, after the manner of monomaniac *kings* with whom we meet among assemblages of the insane; but the walls of his cell, which he regards as a dungeon, present, written in large characters, both words and phrases, which disclose his mental condition. Observe some of the inscriptions, which he has traced in the form of letters, as they stand upon the walls:

I have—. Tuesday—. *A rabble of Frenchmen*—. Farther on: *Mortal hatred to the French Nation*,—to the people, to the Nobility—by S. A. R., Prince of Bourbon, etc. April 1st, 1837: Son of Louis XVI.—King. Below: I am not a *Man*—but a PRINCE—King—MONARCH.

This hatred of the French, and these titles which he proclaims with pride, constitute the subject of all his letters and writings. He feels indignant at the injustice that restrains him by prison bolts; so great and powerful as he is. He pretends that they have taken possession of him by supernatural means, which spies,—selected from the most degraded of the French people,—employ; *by pouring upon his majesty, torrents of electricity, in order to annihilate him.* Sometimes he refuses food, not wishing to be nourished like the clowns of his corridor. His food ought to be prepared in royal kitchens.

His grandeur and power permit him to recognize, as his relatives and friends, none other than the Bourbons, Ferdinands, Nicholases, etc. For some months, the physical health of M. H. has been suffering. He has an obstinate cough, loses flesh, sleeps little, and takes little food. His tongue seems to be somewhat embarrassed, and his memory enfeebled. In his writings, we observe the omission of letters and words; a circumstance which did not occur during the first years of his residence at the hospital. The ideas and words also, which express his delirium, are less coherent.

Monomaniacs, like other insane persons, are subject to illusions and hallucinations, which often alone characterize their delirium, and are the cause of the perversion of their affections, and the disorder of their actions. Numerous facts justify this statement. Transported by enthusiasm, by religious or political fanaticism, warmed by erotic passions, blinded by notions of an imaginary good fortune, flattered by sentiments of a felicity of which they deem themselves alone worthy, monomaniacs entertain little affection for their relatives and friends, or their tenderness is exaggerated. They often disdain persons whom they were accustomed to love most tenderly, and feel a sort of pity for them, in consequence of their pretended ignorance, or supposed poverty, or because they are unworthy of understanding the good fortune of the monomaniac, or of participating in it. Like all insane persons, these patients neglect their own interests and affairs, and treat with contempt the usages of society. There are insane persons educated in conformity with the strictest principles, remarkable for the rectitude of their understanding, for the delicacy of their sentiments, for the mildness of their dispositions, and for a uniformly sober and moral life; who, in consequence of some physical or moral causes, change their disposition and habits of conduct, become turbulent and unsociable, and perform odd, singular, culpable, and sometimes dangerous acts, in opposition to their affections and interests. A partial lesion of the understanding causes these changes, and perverts the sentiments and actions of this class of patients.

Thus, the old man, who believes that he hears the voice of an angel, who commands him to offer up his son, after the example of Abraham, and performs this sacrifice, is a monomaniac. I once had under my care, says Pinel, in the hospital of the Bicêtre, an insane man, whose mania was periodical, and whose attacks were renewed regularly, after several months of composure. The invasion of the attacks were announced by a sensation of intense heat in the abdomen, afterwards in the chest, and finally in the face. To this succeeded redness of the cheeks, a sparkling eye, and great distension of the veins and arteries of the head, followed by a raging fury, which led him, by an irresistible impulse, to seize an instrument or weapon, to assault the first person who appeared. A kind of internal contest, he was accustomed to say, he constantly experienced, between the ferocious impulse of a destructive instinct, and the profound horror with which the idea of crime inspired him. There was no indication of wandering in his memory, imagination and judgment.

He confessed to me while closely confined, that his inclination was absolutely irresistible and involuntary; that his wife, notwithstanding his tenderness for her, had just escaped falling a victim to it; and that time only was given him to warn her to flee. The same lucid intervals bring back the same reflections and expressions of remorse. On account of it, he had conceived such a disgust for life, that he had several times sought to terminate his existence. This was a striking example of monomania.*

The following case is remarkable, for the alternate recurrence of excitement and composure. Mad'e de R., who was of a strong constitution, al-

* Pinel, Medico-Philosophical Treatise on Mental Alienation.

though rickety, of a sanguine temperament and ardent imagination, suffered seriously, in consequence of the revolution, and many domestic griefs. Having been left a widow with the wreck of a large fortune, she shuts herself up on an estate, in order to live more economically, and to superintend the education of her children. When about fifty years of age, after the cessation of the menses, she passes a very active winter, occupied with her affairs, enjoying society, seeking the world once more, and taking much exercise. In the spring, and during the summer, she is composed, more sedentary and indolent, living alone, taking no care of her fortune, and deciding upon nothing. In these conditions respectively, which are renewed alternately for several years, she fulfilled the duties of an excellent mother, wanting in none of the proprieties of life. It was necessary to live on terms of intimacy with her, in order to perceive the change in her manner which took place during summer and winter. At the age of fifty-five years, she is deeply afflicted in consequence of the departure of her son for Ghent. She immediately conceives, that the greatest misfortunes are about to happen to Paris, and that she shall be more disastrously affected by them, than any other person. She becomes agitated, goes abroad, every where expressing her fears, and loses her sleep. A cerebral congestion at length occurs, and thirty leeches are applied to the lower extremities, her full habit not allowing general blood-letting. The leech-bites provoke an eresypelas on each limb. This accident leads the patient to believe that poisonous leeches have been employed, that her life has been in jeopardy, and that she shall die in consequence of their use. To this fear, an attack of mania succeeds, of which she is promptly cured, and leaves for the country. In 1817, she has another attack, which persists for a year. For three years she appears to be restored, beyond the danger of relapse, when, in the month of Sept. 1820, during a feast which she was in the habit of making for her friends, and the tenants on her estate, some sheaves, belonging to a farm in the neighborhood of the château, are set on fire. She immediately conceived that she was environed by flames, and surrounded by enemies and soldiers.

On the following day she sets out for Paris, and on the journey, which is one of a hundred leagues, she sees soldiers fighting, and the flames devouring the harvests and dwelling places of the inhabitants. She is in a frightful delirium, and ceases not to utter cries of terror. She is committed anew to my care, and after some days of repose, baths, in connection with affusions of cold water and laxative drinks, reëstablish composure, but the delirium persists. She is incessantly talking, even during the night. She converses with princes and kings, who are her ancestors. The most distinguished monarchs pay her visits; the illustrious dead appear to her, and she converses with them; now, with transports of passion, uttering reproaches; now, with tranquillity, offering them advice, and announcing to them the most important events. Mad'e de R. regards herself as a sovereign, moves with a lofty step, proclaims her power and strength, and issues her commands with pride. A hundred times a day, however cold it may be, she opens a window of her apartment, and utters to the winds, accusations or justifications; seeming to hear persons who address her. While the exasperation of her symptoms continue, her face is flushed, and her complexion more than usually sallow. Insomnia and constipation are obstinate. Winter passes in this state of excitement. Nevertheless, she distinguishes persons and things, converses in a connected manner, on every other subject than that of her grandeur, her ancestry, and the dangers to which her enemies have subjected her.

In the spring, she becomes more peaceful. Whilst preserving her ridiculously vain delirium, she is less active, walks less, and says little. She also sleeps more, and can engage in reading the journals, and books of travels. After eight years, passed in alternate seasons of excitement and repose, she

becomes habitually more peaceful; often speaking in a low voice, and sometimes with passion. She articulates her complaints with distinctness, or laughs convulsively, and is always disturbed by hallucinations of hearing. Notwithstanding her incoherence of thought and language, which has become habitual, she retains a knowledge of external objects, and is kind towards those who are about her. At the age of sixty-eight years, she had become very corpulent, and suffered from an attack of cerebral congestion, which was immediately removed, by applying leeches to the neck. Whilst the attack lasted (which was for about an hour), every thing appeared to the patient to be black, even the persons who addressed her, and whose voices she recognized. Subsequently, the abdomen became gradually distended, swollen and renitent, without fluctuation. At the age of seventy-two years, the extremely voluminous condition of her abdomen embarrassed her respiration and movements. She often suffered from somnolence during the day, complained of thirst, and had alternate attacks of constipation and diarrhœa. When seventy-three years of age, dyspnœa causing us to fear for her life, we tapped her, but nothing followed the puncture but a gelatiniform substance, of a citrine color; nor could we obtain but a few ounces even, of this. Six weeks after this operation she died.

On opening the body, July 1st, 1834, we witness a general emaciation, the abdomen considerably distended, and without fluctuation. There was a curvature of the spinal column, the cranium was thick and dense at several points, and the internal table perforated by granulations springing from the dura-mater. This membrane closely adhered to the cranium, over a great extent; the arachnoid was dense, and the pia-mater injected, especially on the right side, and separating without tearing, from the cortical substance. The right lobe of the brain was injected, and the lateral ventricles of the same side slightly developed. The left lobe was pale, when compared with the right one, whose ventricle was developed one third more than that of the opposite side. The cerebellum and spinal marrow are in a normal state. The capacity of the chest is reduced by the pressing upward of the abdominal contents. The lungs are healthy. The heart is voluminous, and there are some points of ossification upon its valves. The walls of the abdomen are thinner than natural, and its cavity distended by a tumor, resulting from the development of the left ovarium. The interior of it is divided by incomplete partitions, and filled with a gelatinous fluid, thick, and reddish in some parts, and of a yellowish white in others. From it, proceed numerous vessels, which ramify upon the partitions which divide the tumor, and are finally lost, in various parts of the contained fluid. The uterus is voluminous, and is divided by a partition, which extends even to its neck. The stomach is atrophied, and its internal surface slightly injected. In the cœcum, we observe an appendix, formed by a conical and fluctuating tumor, of the size of a small pear, and containing a fluid analogous to that of the ovarian cyst. The liver is small, the gall bladder wasted away, and containing small, blackish, polyhedral calculi. The spleen is small, easily torn, and its peritoneal membrane contains fine cysts, the largest of which has the volume of a large chestnut. Each cyst contains a fluid, similar to that contained in the tumors of the ovary and cœcum.

Monomania is sometimes epidemic. Was not that strange disease, which desolated Holland and the province of the Rhine in 1373, under the names of *mal des ardens*, and *mal de Saint-Jean*, an epidemic? Those who were attacked with it, laid aside their accustomed habits, crowned themselves with flowers, and carried them in their hands. They ran about the streets also, and into the temples, singing and dancing. The abdomen was so greatly distended, that many would have died, had they not taken care to swathe it. The writers who give an account of this strange disease, inform us, that the

laboring classes abandoned their occupations. They add, that the rich took care to protect themselves by their domestics, through fear of doing violence to their persons, and in order to avoid those objects which might injure them. This precaution shows, that among this class of patients, the delirium was partial.

In Don Quixote, we find an admirable description of monomania, which prevailed over nearly the whole of Europe, in consequence of the crusades: a medley of amorous extravagance, and chivalrous bravery, which in many cases was a real insanity.

[Probably no event in modern times has furnished a fairer example of epidemic monomania, than the great rally in behalf of what is now known by the appellation of "Millerism." This delusion originated in the readings, reflections and dreams of one Wm. Miller, of the State of New York, who, in one or all of the ways specified, came to know about the year 1840 at what time "the Lord was to appear in the Heavens," and the end of all things to come. He soon found adherents—as will the author of any "humbug" however palpable—who, with a zeal worthy a better cause, set themselves to proselyting. They went abroad preaching their doctrine to all who would hear, and publishing their views to the world, through periodicals and newspapers, which owed their origin to the success of the learned author and abettors of this new creed in leading astray the people. At the outset, they pitched not only upon the year, but the day and hour on which the "Son of Man should come, with power and great glory." A doctrine like this, solemn and momentous beyond expression,—spread abroad with all the rapidity that novelty could lend to it, the zeal of its adherents effect, or its importance inspire, soon collected around its standard, throngs of ignorant men and silly women, who hugged the delusion, as the announcement of great events, and the supporter of raptures and glorious ecstasies. The beggarly amount of intellect with which its deluded followers were possessed, soon yielded to the force of religious excitement, and long before "the time drew near when they were to be received up," they forsook their respective callings, closed their shops and stores, left their families to suffer, or to the cold charities of the world, attending meetings for prayers and exhortations, "rendering night hideous by their screams," and by ceaseless prayers and watchings, intending to open in "the great day of the Lord."

The excitement of which the above brief representation furnishes, by no means an exaggerated description, soon began to produce its effects upon both the bodies and minds of these wretched beings. A pale and haggard countenance, indicative at once of physical exhaustion, and great mental solicitude, strange and erroneous views in reference to their worldly relations and affairs, together with their conduct, which showed that the controlling power of reason was swallowed up in the great Mælstroom of Millerism, all indicated the shock which had been produced by the terrors of this fearful delusion. As the time for the great dénouement approached, meetings increased, their prayers and praises ascended upward, and were heard far and wide around, converts were multiplied, baptisms were celebrated, not by sprinkling, but by immersions, which lasted sometimes longer than life, the gift of tongues was vouchsafed, ascension robes of snowy whiteness were made ready, property was freely given up,—to the priests instead of the poor,—and on the morning of "the great day," with hearts prepared and decked in robes of peerless white, they go forth to meet the "bridegroom." Some, not content to meet him upon the earth, actually ascended trees, in order first to greet his approach. The day first announced passed off quietly, and as on other days, the world and the world's people jogged on in their accustomed course and round of duties. But great was the disappointment of the deluded followers of the doctrine of "Miller." Their time, for weeks and months had been lost, their business broken up, and their property gone. Yet to exhibit, as it were still more forcibly, the strength of religious fanaticism operat-

ing upon weak minds, they still clung to their delusion; again "searched the scriptures," and happily found that they had been in error. It was on a certain day and hour of the Jewish year 1844, on which their calculations should have been based, instead of the corresponding year of our calendar. The joyful fact was spread abroad throughout the realms of Millerdom, and at it they went with greater zeal and fervor, if possible, than before.

Our Institutions for the Insane however, were daily furnishing new proofs of the mental ravages it was producing throughout the country. Miller maniacs were almost daily brought to their doors, worn out and exhausted by the ceaseless orgies of this devoted sect. Some were already in heaven, clothed with the new bodies provided for the saints; others like spectres were hastening to convert to the same faith their fellow-victims to disease; while a third class refused to eat, having no further need of other "than angels' food." So strictly did many of the "believers" adhere to cherished passages of the Sacred Scriptures, that they declined to go abroad to respond to the calls of nature; because forsooth, we were commanded "to become as little children;" and hence soil their under-dresses. None slept, or slept but little; all were waiting; waiting in obedience to a divine command, though sleep alas was far, far from their eyes in consequence of the long-continued watchfulness which had been imposed. They had passed the point of sleep; some of them the rallying point of exhausted nature, and sunk to rise no more. Scores of the victims to this modern delusion, were known by all, to be the tenants of Mad Houses, and it was promulgated far and wide by the most respected authorities, that this was a legitimate result of their misguided views and acts; yet it fell unheeded upon the ears of those for whom in kindness it was designed. Meanwhile, the period approached when the correctness of their last reckoning was to be verified, and all appointed means of excitement were called into requisition. If possible, a more firm conviction of the truth of Millerism existed in the minds of its followers generally, than before; converts to it had increased, and all the elements of a prodigious and extended commotion were concentrating, preparatory to this great event. The scenes which were enacted in view of the fulfillment of this second interpretation, greatly exceeded the first. Like the first, it proved to be the "baseless fabric of a vision." Rational men then said "they will now give it up," and sane men were all of one mind on the subject. The "Cry" of Nov. 22d, 1844, however, announces the fact, that "our brethren and sisters are not only strong, but much stronger than ever. Our brethren are all standing fast, and expecting the Lord every day." For centuries probably has no excitement been fraught with more deplorable results, both to the bodies and minds of men than this, which has already been characterized by two marked and striking crises. Still the fever rages, notwithstanding these critical periods, which usually betoken a fatal terminiation, or a gradual restoration to health. Though a firm and uncompromising friend to the doctrine of "toleration" in all matters of opinion, not inconsistent with reason and the interest and welfare of man, I am here in favor of restraint; nor do I know of any better way to check the progress of this piece of modern fanaticism, than to let it rage within the limits of the law; conveying to those receptacles of human woe,—our Insane Hospitals,—those whose mental condition requires it, appointing guardians for, or sending to work-houses, such as refuse to provide for themselves or families, and incarcerating such as may be found, seizing with unholy hands, under the guise of religion, the miserable pittance of deluded men and women.

I have gone over the surface of this subject, I allow. I did not approach it for the sake of its statistics; to inform the profession or others particularly, respecting its principles, or to compare them with those of other sects. My intention has been to glance at its leading features as they appeared in the practices of its believers; showing the tremendous mental commotion they were calculated to produce on weak and excitable minds; and state in general its results, and the means, so far as practicable, of doing away this great popular evil.]

The functions of assimilative life, do not in general appear to suffer, and are performed without occasioning any fear for the life of the patient. Nevertheless, the pulse of this class of patients is developed, hard and strong; and the expression animated. The heat of the skin is considerable, and it is sometimes moist. These patients eat much, and sleep little. Their rest is disturbed by dreams, now painful, and now of a pleasurable character. They often suffer from abdominal pains and heats, and sometimes from constipation. The causes which predispose and produce monomania, are the same with those which produce insanity in general. Sanguine and nervous-sanguine temperaments, and persons endowed with a brilliant, warm and vivid imagination; minds of a meditative and exclusive cast, which seem to be susceptible only of a series of thoughts and emotions; individuals who, through self-love, vanity, pride and ambition, abandon themselves to their reflections, to exaggerated projects and unwarrantable pretensions, are especially disposed to monomania. It is remarkable, that these individuals almost invariably beguile themselves with the hope of a happy fortune, when, stricken by some reverse, or disappointed in their lofty expectations, they fall sick. Thus, a man who is actually happy, and moderate in his desires, and who, by some exciting cause, becomes insane, will not be a monomaniac; whilst an ambitious, proud, or amorous man, who shall have become unfortunate, or have lost the object of his affections, will. It would seem as if monomania were only an exaggeration of the thoughts, desires and illusions with respect to the future, with which these unfortunate beings amuse their fancy, previous to their illness.

A weak understanding, little cultivated or developed; and the want, or vices of education, also predispose to monomania. The exciting causes are; errors of regimen, strong passions, and especially reverses of fortune, disappointed self-love, or ambition. Religious excitement also, ascetic meditations and the reading of romances, often produce this disease among those who are essentially controlled by pride and vanity. By uniting the physical and mental causes of mania, particularly those which suppose strong, energetic and expansive passions, with the predisposing and exciting causes of lypemania, one will form a correct idea of the causes of monomania. Monomania is remittent or intermittent; and the symptoms are exasperated, particularly at the menstrual periods. It is sometimes preceded by melancholy and lypemania, and is complicated with epilepsy, hysteria, hypochondria, and very frequently with paralysis. The progress of monomania is rapid and violent. Its termination is often unexpected, and is effected like other forms of mental alienation, by crises, more or less sensible. But it not unfrequently terminates suddenly, without cause, or perceptible crisis, or by a vivid moral impression. Monomania sometimes passes into mania, and sometimes alternates with lypemania. When prolonged, it degenerates into dementia; but there exists an intermediate state, which, I believe, has not been pointed out, although constant. In the acute stage of monomania, when it is uncomplicated, the monomaniac preserves entire the integrity of his understanding, especially in respect to whatever is beyond the sphere of his delirium; and, admitting his leading idea to be just, he reasons and decides very correctly. But when the disease degenerates into a chronic state, the monomaniac is not only irrational in his hypothesis, but his reasonings, affections and acts, which were previously, the proper consequences of the idea or controlling affection of his mind, no longer maintain their logical and natural connection. The insane man cannot now control his reason, in that sphere of thought and conviction, whatever it may be, which is generated by, and characterizes his malady. At length, although the delirium is still limited to a determinate subject, we observe as in dementia, incoherence of the ideas, affections and acts. This remark is also applicable to lypemania. The treatment of monomania should, as in other forms of mental alienation, be directed with a special reference

to the predisposing and exciting causes of the disease, and to the physical disorders. The intellectual and moral symptoms should have great weight in the therapeutic views of the physician. In this malady, which is characterized by a peculiarly nervous condition of the system, antispasmodics are very useful. While we may, with advantage, have recourse to hygienic agents, it is proper also, to hope for success from moral treatment. Here, more than in other forms of mental disease, and with better hopes of success, we apply to the understanding and passions of the patient, with a view to effect his cure. We have recourse to surprises, subterfuges, and oppositions, ingeniously managed, as circumstances suggest, the genius of the physician gives birth to, and as experience may hit upon, and appropriately pursue.

[There is perhaps no form of insanity to which the "moral revulsion," so highly commended by Leuret, is better, if as well adapted as that of monomania. We must admit however, that if the principle holds good in this, it may be equally well suited, though more difficult of application, to all the others. We apply it instinctively, in the treatment of those cases of mental disease, which are connected with *depression* of mind. We cheer up the desponding in heart; offer encouragement to the timid and doubting; and bid the weak be strong. So rare is it, in any of the forms of insanity connected with depression of mind, particularly in the early stages, to find the organic functions healthfully performed, that we can hardly fail to entertain a sympathy for the afflicted sufferer, which precludes all thought of the moral revulsion of Leuret. A man whose sentiments of humanity are properly cultivated, would almost as soon think of moral revulsion in the treatment of idiopathic fever, as in a case where, in connection with the extreme depression of lypemania, he observed indications of serious functional disturbance of the digestive apparatus, or other important portion of the system. In monomania on the contrary, an opposite principle, yet with the same intent, is often quite as instinctively called into play.

On the one hand is a king who, without any marked indication of physical infirmity, and frequently indeed furnishing satisfactory evidence of good bodily health—except that which is inferred from the existence of intellectual derangement,—demands obeisance, and threatens direful punishments, if any fail to obey. On the other, a man not worth a groat, who has possibly been the tenant of an alms-house, and removed to an establishment for the insane from motives of humanity, is strutting about in his soiled and shabby dress, a Crœsus in wealth, and dispensing thousands in consideration of the smallest favors, and even ordinary civilities. In such cases, the promptings of the natural heart suggest the "leveling system," and the king soon finds, from the treatment which he receives, that distinctions of rank are decidedly unpopular, even if they do not subject their possessor to the moral revulsion of Leuret, both on the part of his associates, as well as that of the resident officers. The money-king is treated with equal incivility; and he who with a spoonful of ink and a stump of a pen, dispenses his "checks" for sums,—of which he keeps no record,—and which fancy suggested, finds it exceedingly difficult, if not quite impossible, to raise the smallest amount, in funds available for the supply of a want, or to increase his stock of comforts. Twenty times a day is he reminded, in a manner most offensive to the unperverted feelings of man, by his fellow-patients who recognize his infirmity, of his poverty and utter destitution. His own senses corroborate their statements. Yet what does it avail? To employ the douche, or any other agent which will inspire the patient with fear and dread, may repress the expression of the "one idea" which occupies the mind, but will it be eradicated thereby? Will it of itself have any tendency towards effecting this result? Can filling the mind with perpetual alarm, exclude this "idea," so that eventually, when the former emotion is removed by the restoration of the patient to liberty, the latter will not return? One of the great advantages resulting from fear consists in this, that it leads the patient to

exercise self-control, and also, in many cases, secures that submission which induces a ready compliance withthose hygienic measures which are regarded as useful in restoring the bodily and mental health.

I have known patients who were insufferably insolent and abusive, as well as perverse and obstinate, reduced to a state of quietude and ready obedience that could not have been anticapted, by a single application of the shower bath. A mode of treatment analogous to that of Leuret, was once employed in the cure of a man who regarded himself, and demanded that he should be addressed, as the "Emperor of the World." In the immediate prospect of the bath however, his regal dignity would forsake him, and he was most willing to admit that he had never been, nor was at that time, any other than Mr. R. W. His memory always proved treacherous, and but a few hours would elapse, before the submissive Mr. R. W. becomes again the "Emperor of the World." This gentleman at length recovered, and in view of his absurd pretensions, all of which he perfectly well remembered, was accustomed to exclaim, "why did you not whip me and beat this nonsense out of my brain? I wonder how you could have borne, or I have been guilty of such contemptible arrogance and obstinacy."

There is little reason to doubt,—though gentleness and forbearance be the order of the day,—that those practices, which result from a sort of instinctive impulse,—not passion, nor thoughtlessness, but a principle wrought into the texture of our being, and which is the origin of the idea of Leuret,—have, every where, more or less influence in the treatment of the insane. This doctrine may in many cases, and I again assert, particularly in monomania, prove highly beneficial. The man however who adopts it as his guide, needs much tact, as well as prudence and discrimination, and much of the "milk of human kindness" in his nature, cultivated by education, to carry out the principle of Leuret in such a manner as to cause no offence to an impartial and wise observer, competent to decide upon the propriety of the measure, as a remedial agent, and the frame of mind which led to it.]

EROTIC MONOMANIA.

Erotomania is not that languor, which prevades the heart and soul of him who experiences the first impulses of a desire to love, nor that soft revery, which has such charms for youth, and which lead him who has once felt its influence, to seek again for solitude, the better to taste at leisure, the luxury of a sentiment, which was before unknown to him. This is not a disease; it is melancholy. Erotomania comes within the province of medicine, is a chronic cerebral affection, and is characterized by an excessive sexual passion; now, for a known object; now, for one unknown. In this disorder, there is a lesion of the imagination only. There is likewise an error of the understanding. It is a mental affection, in which the amorous sentiments are fixed and dominant, like religious ideas in theomania, or in religious lypemania. Erotomania differs essentially from nymphomania, and satyriasis. In the latter, the evil originates in the organs of reproduction, whose irritation reacts upon the brain. In erotomania, the sentiment which characterizes it, is in the head. The nymphomaniac, as well as the victim to satyriasis, is the subject of a physical disorder. The erotomaniac is, on the contrary, the sport of his imagination. Erotomania is to nymphomania and satyriasis, what the ardent affections of the heart, when chaste and honorable are, in comparison with frightful libertinism; while proposals the most obscene, and actions the most shameful and humiliating, betray both nymphomania and satyriasis.*

* See article Satyriasis, by Doctor Chas. Londe, in the *Dictionary of Practical Medicine and Surgery*, t. xiv, p. 517.

The erotomaniac neither desires, nor dreams even, of the favors to which he might aspire from the object of his insane tenderness; his love, sometimes, having for its object, things inanimate. Alcidias of Rhodes, is seized with an erotic delirium for the Cupid of Praxiteles. Variola relates the same fact, respecting an inhabitant of Arles who lived in his time. In erotomania, the eyes are lively and animated, the look passionate, the discourse tender, and the actions expansive; but the subjects of it never pass the limits of propriety. They, in some sort, forget themselves; vow a pure, and often secret devotion to the object of their love; make themselves slaves to it; execute its orders with a fidelity often puerile; and obey also the caprices that are connected with it. While contemplating its often imaginary perfections, they are thrown into ecstasies. Despairing in its absence, the look of this class of patients is dejected; their complexion becomes pale; their features change; sleep and appetite are lost. They are restless, thoughtful, greatly depressed in mind, agitated, irritable and passionate. The return of the object beloved, intoxicates them with joy. Their extreme happiness is apparent throughout their whole frame, and spreads to every thing that surrounds them. Their augmented muscular activity is convulsive in its character. These patients are ordinarily exceedingly loquacious, and always speaking of their love. During sleep, they have dreams which give birth to *succubi* and *incubi*.

Like all monomaniacs, those suffering from erotomania, are pursued both night and day, by the same thoughts and affections, which are the more disordered as they are concentrated or exasperated by opposition. Fear, hope, jealousy, joy and fury, seem unitedly to concur, or in turn, to render more cruel the torment of these wretched beings. They neglect, abandon, and then fly both their relatives and friends. They disdain fortune, and despising social customs, are capable of the most extraordinary, difficult, painful and strange actions.

The following case is the more interesting, as it presents the characteristics of erotic delirium without complication. A lady thirty-two years of age, tall, of a strong constitution and nervous temperament, having blue eyes, a light complexion, and chestnut colored hair, had received her education at a school, in which the most brilliant future, and the highest pretensions were presented in perspective, to those young persons who went from this institution. Some time after her marriage, she saw a young man of a higher rank than her husband, and immediately becomes strongly impressed in his favor, though she had never spoken to him. She begins by complaining of her position, and speaking with contempt of her husband. She murmurs at being obliged to live with him, and at length conceives an aversion for him, as well as her nearest relatives, who endeavor, in vain, to recall her from her error. The evil increases, and it becomes necessary to separate her from her husband. She goes into the family of her father, discourses constantly of the object of her passion, and becomes difficult, capricious and choleric. She also suffers from nervous pains. She escapes from the house of her relatives to pursue *him*. She sees him every where, and addresses him in passionate songs. He is the handsomest, the greatest, the most humorous, amiable and perfect of men. She never had any other husband. It is him who lives in her heart, controls its pulsations, governs her thoughts and actions, animates and adorns her existence. She is sometimes surprised in a kind of ecstasy, and ravished with delight. She is then motionless; her look is fixed, and a smile is upon her lips. She frequently writes letters and verses, copying them several times, with much care; and though they express the most vehement passion, are proof of the most virtuous sentiments. When she walks, she moves with sprightliness, and with the air of one engrossed in thought; or else her step is slow and haughty. She avoids men whom she disdains, and places far below her idol. However, she is not always indifferent to those marks of interest

that are shown her; while every expression, that is not altogether respectful, offends her. To proofs of affection and devotion, she opposes the name, merit, and perfections of him whom she adores.

During both day and night, she often converses by herself; now, in a high, and now, in a low tone. She is now, gay and full of laughter; now, melancholic, and weeps; and is now angry, in her solitary conversations. If any one refers to these, she assures him that she is constrained to speak. Most frequently it is her *lover who converses with her, by means known to himself alone.* She sometimes believes, that jealous persons endeavor to oppose her good fortune, by disturbing their conversation, and striking her. (I have seen her ready to break out into a violent paroxysm of fury, after having uttered a loud cry, assuring me that she has just been struck). Under other circumstances, her face is flushed, and her eyes sparkling. She rages against every one, utters cries, and no longer recognizes the persons with whom she lives. She is furious, and utters the most threatening language. This state, which is usually temporary, sometimes persists for two and three days, after which, the patient experiences violent pains at the epigastrium and heart. These pains, which are confined to the precordial region, and *which she could not endure without aid furnished by her lover, are caused by her relatives and friends, although they may be several leagues distant from her, or by persons who are about her.* The appearance of force, and words spoken with decision, restrain her. She then grows pale, and trembles; tears flow, and terminate the paroxysm.

This lady, who is rational in every other respect, labors, and carefully superintends the objects, which are adapted to her convenience and use. She does justice to the merit of her husband, and the tenderness of her relatives, but can neither see the former, nor live with the latter. The menses are regular and abundant; the paroxysms of excitement ordinarily taking place at the menstrual period, though not always. Her appetite is capricious, and her actions, like her language, are subordinate to the whims of her delirious passion. She sleeps little, and her rest is troubled by dreams, and even nightmare. She has long seasons of watchfulness, and when she does not sleep, walks about, talking to herself or singing. This disease was of several years' duration, when she was committed to my care. A systematic treatment for a year, isolation, tepid, cold and shower baths, antispasmodics externally and internally employed, none of them succeed in restoring to the use of her reason, this interesting patient.

M., thirty-six years of age, is of a nervous temperament, a melancholy disposition, and small stature. His hair is black, and his physiognomy but slightly agreeable. A native of the south, he occupies a common position in an office at Bayonne. Being at Toulouse, he had a quarrel in behalf of a woman, by whom he believed he was beloved. He obtains leave of absence, and betakes himself to Paris, in order to solicit advancement. He goes to the theatre, and conceives a passion for one of the most beautiful actresses of Feydeau, and believes that his sentiment is reciprocated. From this period, he makes every possible attempt to reach the object of his passion. He presents himself at the residence of this lady, and leaves not the door by which the actors enter the theatre, hoping to enter with them, or obtain a passing look from her whom he adores. The actors, and the husband of the actress, revile this wretched man; repulse, abuse, and maltreat him. Whenever the object of his passion appears upon the stage, he attends the theatre, places himself *on the fourth* tier of seats opposite the stage, and when this actress appears, waves a white handkerchief to attract her attention.

Her face then becomes flushed, her eyes injected and shining. He maintains that she recognizes him, and testifies her regard for him by the play of her countenance, the tone of her voice, and the passionate expression of her

song. In the most rigorous weather, he takes his position upon, or near the steps of the door of the house in which she resides. He follows her footsteps, pursues her in her walks, and when she goes into the country, proceeds after her carriage on foot. He is, at length, arrested in the Tuileries, for having raised with his cane, the dress of this lady. Sometimes, and even during the night, he takes a hackney coach at a suitable hour, stops in front of the residence of this lady, and mounts the roof of the carriage, hoping to see the object of his passion through the windows. Notwithstanding the insults and blows which this unhappy man receives at the theatre and in the streets; notwithstanding the ill treatment of every kind which is heaped upon him, it fails to remove his illusion. The disdain, and refusals of the young actress to speak with him, are precautions employed, the better to conceal her love. The blows with which he is assaulted, are often the result of jealousy on the part of his rivals. After a very violent altercation with the husband of this lady, whom M. maintains is not married, he is brought to a private hospital, where I was charged with the duty of establishing the condition of his mind. It was not difficult to recognize his erotic delirium. On every other subject, he reasoned very correctly, his interests were regarded, and his conversation was coherent. I represented to him that he ran a risk of losing his place, by not returning promptly to Bayonne. My leave of absence, he replied, has not yet expired. But, said I, how could you attend the theatre, with an income of only 900 francs? I am at no other expense, my food costing me almost nothing. I go to the theatre only when *Mademoiselle* plays, and I there exercise the utmost economy. How could you believe that she loves you? You have nothing engaging, particularly to an actress. Your person is not handsome, and you possess neither rank nor fortune. All that is true, but love does not reason, and I have seen too much to leave me to doubt that I am loved. Some weeks subsequently, on seeing him, he confessed to me, that *Mademoiselle* resided in the house; that he heard her, but that, in consequence of the same jealousy that had previously prevented his meeting her, she had been prevented from speaking to him.

Erotomania does not always manifest itself by the same symptoms that we have just described. It is sometimes the more violent, in proportion as it is concentrated. It masks itself under a deceptive exterior, and is then more fatal still. The patients are not irrational, but sad, melancholic, gloomy, taciturn, lose their appetite, become rapidly emaciated, and fall into a fever, which Lorry denominates an *erotic fever*. It has a course more or less acute and fatal. This condition may be readily confounded with chlorosis. But we can easily avoid an error. If, after having obtained all possible information respecting antecedent circumstances, the physician is attentive, he will observe, that the countenance of this class of patients assumes an animated tone, and becomes flushed; the pulse frequent, stronger, and quick, in the presence of the object beloved, or even on hearing the name pronounced, or the individual alluded to in conversation.

A young female, with no apparent physical disease, without any known cause, becomes sad and thoughtful. The countenance assumes a pale hue, the eyes sink in their sockets, and the tears flow involuntarily. The sufferer experiences turns of prostration, without previous exertion; groans and sighs. Nothing diverts her, or engages her attention. On the contrary, every thing wearies her. She avoids her relatives and friends; and neither speaks nor replies to any one. Her appetite is feeble, and capricious. She does not sleep; or if she does, her rest is disturbed, and she becomes emaciated. Her relatives expect, by marriage, to restore her from this condition, which fills their minds with disquietude. She accepts, at first with indifference, the various proposals that are made to her. Shortly after however, she refuses them all with obstinacy. The malady continues to increase, and fever ensues. The

pulse is irregular, disordered, and sometimes slow. Certain convulsive movements are observed, some thoughts irrationally expressed, and particularly certain strange actions. She finally sinks into marasmus, and dies. Death revealed the secret. Diffidence, an imperfect religious education, and the fear of displeasing her relatives, have determined her to conceal the emotions of her heart, and the true cause of her malady.

Jonadab does not permit himself to be deceived by the sadness, languor and declining health of Ammon, the second son of David, who had become enamored of his sister Tamar. Hippocrates discovers the love of Perdicax, son of Amyntas, king of Macedonia, for Phyla, a concubine of his father; a passion which occasioned a hectic fever. From the state of the pulse and the redness of the countenance, Plutarch relates that Erasistratus recognized the cause of the disease of Antiochus Soter, who was dying with love for his mother-in-law Stratonice. Galen gave an opinion equally correct, respecting the condition of Justine, who had become enamored of the actor Pilades. J. Ferrand* states that he discovered the disease of a young man who died of love, by the flush upon his countenance, and the acceleration of his pulse, at the sight of a girl who was accustomed to bring a light into his chamber.

This variety of erotomania is not rare. There are few physicians who have not had occasion to observe and propose a remedy for it; which is sometimes too late, when the disease has a very acute course. A young lady of Lyons falls in love with one of her relatives, to whom she was promised in marriage. Circumstances oppose the fulfillment of promises made to the two lovers, and the father requires the removal of the young man. He has scarcely gone, when this young lady falls into a state of profound sadness, says nothing, confines herself to her bed, refuses all nourishment, and the secretions become suppressed. She repulses all the advice, prayers and consolations of her relatives and friends. After five days, vainly employed in endeavors to overcome her resolution, they decide on recalling her lover; but it was now too late. She sinks, and dies in his arms on the sixth day. I was struck with the rapid progress of this malady, in the case of a woman who died in seven days, after having established in her mind a conviction of the indifference of her husband.

When erotomania has not a termination so sudden and deplorable, it presents the features of the most vehement of the passions; of which it seems to be but an exaggeration, and the extreme limit. It resembles mania with fury. It leads to suicide, through despair of not being able to obtain the object beloved. Sappho, unable to soften the severity of Phaon, precipitates herself from the Leucadian rock, which has since become so celebrated. The ancients were accustomed to send to Leucadia, those lovers who could neither support nor conquer their passion. The cures attributed to the leap at Leucadia, prove that the ancients regarded erotomania as a true nervous affection, which might be cured by a strong moral shock. Facts related by the ancients, as well as those which are daily observed, prove, that in all times, suicide has been one of the terminations of erotomania. Amorous lypemania is complicated with mania, and sometimes preceded by it. The following cases justify these propositions.

A young man twenty-three years of age, becomes enamored of a young woman, and conceals his passion for more than a year. Having danced with his friend on a certain occasion, he is seized with convulsions, which recur, at brief intervals, for three days. During the period of their remission, he is slightly delirious. After the convulsions had ceased, he became a maniac, violent, choleric, agitated; constantly endeavoring to escape. At the expiration of two months, the patient is committed to my care. Although his delirium was general, and his agitation extreme, he was accustomed to trace upon

* The Disease of Love, or Erotic Melancholy, Paris, 1623, in 8vo.

the pavement and walls, the name of her who was the object of his every thought, and constantly walking about in the hope of finding her. On the sixth month of the malady, he was seized with a fever, which terminated the erotic mania.

Madeleine, at the age of fifteen years, is taken from the Foundling hospital, to the family of a country woman who, supposing that her only son had died in the army, adopts her as her daughter. Two years afterwards, her son returns. Soon, the pleasing person and cheerful disposition of Madeleine attract Jean-Pierre. On her part, she loves him with all her heart, she complies with his desires, and would have regarded herself as ungrateful, in refusing any thing to the son of her mother by adoption. Three years pass in this tender intimacy, and with the expectation, on her part, of marrying Jean-Pierre. But he forsakes Madeleine, and marries another. The poor girl, in despair, loses her reason, wanders about the fields, and throws herself into the river, from whence she is taken, and sent to the Hôtel-Dieu. At the expiration of six weeks, she is transferred to the Salpêtrière, early in September. During the first year of her residence in the hospital, she suffers from erotic mania and fury, committing acts of violence upon her companions and herself. To this condition monomania succeeds, whose only object is Jean-Pierre, whom Madeleine loves, notwithstanding his infidelity. At her menstrual periods, her agitation is renewed, when this unhappy being is intractable, irascible and choleric. She is unceasingly calling for Jean-Pierre, often repeats his name, and says that no one is comparable with him. A calm, attended by a painful sadness, returns again, so soon as the menses cease to flow. Madeleine is habitually reserved and thoughtful, meditating upon her infidel lover. She performs some trifling services in the division for the insane, and if any thing is said to her respecting young men, she regards it with disdain. She sings, and sometimes laughs and is very gay; at others, she weeps. She will ever love Jean-Pierre. Those who love sincerely, always love.

A lady eighty years of age, who, in her youth, had lived amidst the illusions of the great, being reduced in her circumstances, to the income of a moderate fortune, spent her time in the country, and enjoyed excellent health, notwithstanding her advanced age. In consequence of the events of 1830, this lady is taken with erotomania. The object of her love is a young man, who has taken an active part in the affairs of this period. She believes that she is beloved, assures herself that her menses are again established, makes her toilet with much display, awaits her lover at the rendezvous, causes food to be prepared which she herself carries to the field, persuaded that the object of her attachment will come to partake of it with her. She hears him address her, she converses with him, sees him, and seeks for him everywhere. After some months, her brain becomes progressively enfeebled; and in one year after the manifestation of delirium, she sinks into dementia. She converses alone, and in a low tone; often pronouncing the name of the object of her delirium.

Mad'e de L., of a nervous-sanguine temperament, a very vivid imagination, and educated on philosophical principles; having a decided taste for the reading of medical writings and romances, enjoyed excellent health, although very nervous and impressible. Reduced almost to penury by the revolution, which cost her husband his life upon the scaffold, she was constrained to form an establishment, to complete her means of subsistence, and secure a livelihood for her son, who only knew how to write bad verses.

She receives into her house a student of medicine, twenty-three years of age. She is at first well disposed towards this young man, but soon becomes prodigal of her attentions to him, and her civilities are exaggerated. At a later period, her carriage, her agitation, her impatience, her gayety and sadness, her thoughtless complaints, and ridiculous expenditures, betray the mo-

ral disorder under which this lady now labors, at the age of sixty-four years. This young man,—though he little merits it,—is ever the subject of her praise. She contemplates his future prospects, his successes and disappointments, more than her own affairs. The crosses and rude conduct; the evident causes of jealousy, and the indifference of the young student, who ridicules the attachment of this superannuated female; the warnings and advice of her devoted friends; the railery of persons who dwell in the house, and the coarse pleasantries of the domestics; all fail to bring back her lost reason, though, in every other respect, she enjoys the respect of society, and performs with spirit and propriety the honors of her house. However, she does not sleep; her appetite is poor; and she becomes emaciated. Never did she entertain the thought of seeking happiness from the pleasures of sense. At the expiration of two years, this student deserts the house; but this does not undeceive her. She not only excuses his clandestine flight, but the serious wrongs and baseness which it reveals. She loves still. She remains for several months, very much depressed in mind, and at length falls into a state of complete wretchedness, and dies eight years subsequently, from a cancer of the uterus.

This case presents a remarkable feature; since, at the age of sixty-four years, when the erotic affection burst forth, the patient menstruated regularly and abundantly for two years; experiencing no interruption of the menses, but from the grief which she suffered, in consequence of the departure of the student. Was the cancer of the uterus, the effect of the cessation of this late menstruation; or rather, was the nervous irritation of the uterus, which so often precedes organic lesions, the prime cause of the erotic delirium?

We have just related cases, which prove that if erotomania is most frequent among the wealthy classes, and the inhabitants of cities, whose education and mode of life exalt the imagination, it spares not the poor, nor the inhabitants of the country. Moreover, if this form of madness is most frequently observed among the young; the cases which precede, demonstrate that it affects also, persons of an advanced age.

Erotomania, like all forms of monomania, may degenerate. The delirium may extend to a greater number of ideas. It may become general; and with the progress of age, terminate in dementia; in which we again discover the first elements of the intellectual and moral disorder, which characterized the commencement of the disease. We have often observed this in the hospitals of the Salpêtrière and Charenton, among women who had been affected primarily with chronic erotomania, but are now in a state of incurable dementia. Erotomania cannot be confounded with hysterical madness. In the latter form, the amorous ideas extend to whatever objects are calculated to excite the nervous system; whilst in erotic mania, the affections take the character of monomania; that is to say, they are fixed and concentrated upon a single object. Erotomania has been particularly noticed among all people. The ancients, who deified love, regarded this disease as one of the forms of revenge, which Cupid and his mother were accustomed to take. Galen affirms, that love is the cause of the greatest physical and moral disorders. Both philosophers and poets have described them, and physicians of every age have made them conspicuous. Erotic delirium spares no one; neither the wise nor foolish. Aristotle burns incense to his wife. Lucretia, made amorous by a philter, destroys herself. Tasso breathes forth his love and despair for fourteen years. Cervantes has given the most varied description of this disease, which prevailed almost as an epidemic in his time, and was modified by the chivalrous manners of the fourteenth century. In the case of Héloïse and Abailard, the erotomania associates itself with the religious sentiments which prevail at the period during which they lived; whilst in Nina, eroto-

mania is represented in dull, spiritless colors, in conformity with the relaxed manners of modern times.

The causes of erotomania are the same with monomania in general. Although this disease appears even in advanced age, nevertheless, it most frequently affects young people, especially those of a nervous temperament, a lively and ardent imagination, and who are led away by the allurements of pleasures. It affects those also, who lead a life of indolence, and exalt the imagination by reading romances, and have received a voluptuous and effeminate education. Masturbation, by increasing the susceptibility of the nervous system; and continence, by provoking its inordinate activity, also predispose to erotic delirium. Where is the seat of erotomania? We have already said, that it is in the head. Is the cerebrum or cerebellum the part affected? On this point, we admit our ignorance; we know nothing respecting it. It is sufficient for us, having learned that this disease constitutes a true alteration of the sensibility and thinking principle, to conclude that there is a lesion of the encephalon. We know nothing beyond this. In what does this lesion consist? We do not know.

Erotomania, being a disease essentially cerebral, should be treated like other cerebral affections. When amorous sentiments affect the nutritive functions, and threaten the life of the patient, marriage is almost the only efficacious remedy. It is in this, as in nostalgia; it is only the accomplishment of the desires of the patient, that can cure him. When erotic fever declares itself, when sadness is extreme, when the cause of his pining away is concealed, skill and address are necessary to discover it; for, once known, an important step towards a cure is attained. If a way still remains accessible to the heart of the patient, we should place near him a person whose qualities and attentions weaken the impressions made by the object beloved. A new impression may destroy the first. When the object of the passion is imaginary, and marriage is impossible, we have recourse to means adapted to modify the susceptibility. Prolonged tepid baths, diluent drinks, whey in combination with nitre, ass' milk, succory, (cichorium intybus), together with a vegetable regimen, are preferable to antispasmodics, which often increase the flame, rather than extinguish it. In some cases, tonics are useful, if debilitating causes have predisposed to the malady, or provoked it. We must not fail to combat the pathological causes, nor lose sight of the fact, that in an erotic fever, as Lorry remarked, there is always a sort of erethysm of the organs of generation. Hence, cold baths, the sitting baths, cold enemata, etc., will be useful. Isolation, diversions, journeys, exercise and manual labor, powerfully concur in the success of the treatment. Moral shocks, as the success attending the leap at Leucadia demonstrates, produce a general impression, which is useful in erotomania, as well as in other varieties of monomania.

REASONING MONOMANIA.

I have already remarked, that there are monomaniacs who are not irrational, whose ideas maintain their natural connection, whose reasonings are logical, and whose discourses are connected, often spirited and intellectual. But the actions of these patients are contrary to their natural affections, to their interests, and to social usages. They are irrational in this sense; that they are in opposition to their own, and the habits of those with whom they live. However disordered their actions may be, these demonomaniacs have always motives more or less plausible to justify themselves, so that we can say of them, that they are reasonable madmen.

In reasoning monomania, the patients are active, and constantly in motion;

converse much, and with vivacity. They were amiable, frank, generous; they have become peevish, deceitful, wicked. They were full of affection and tenderness towards their relatives; they are now discontented, and speak evil of those they once loved, and fly from them. They were provident; they are now profuse. Their actions were regular; they are now inconsiderate, adventurous, and even reprehensible. Their conduct was suited to their state and social condition; it is now irregular, and in no respect suited to their position and fortune. Motives always determine them. By their deportment and conversation, these persons impose upon those who were not acquainted with them previous to their illness, or who see them for a brief period only; so well do they know how to restrain themselves and to deceive.

Pinel* relates the following case: "Profound ignorance, as well as an ill-directed education, or a perverse and ungovernable nature, may produce the lighter shades of this form of mental alienation. An only son, reared under the eye of a feeble and indulgent mother, becomes accustomed to yield to all his caprices, and all the inclinations of a fiery and lawless nature. The impetuosity of his desires increase, and become fortified by age; while money, which is lavishly furnished, seems to remove every obstacle to the supremacy of his will. Does any one resist him, his temper becomes exasperated; he assaults with boldness, and seeks to rule by force. He lives amidst continual conflicts and strife. If any animal, a sheep, dog or horse, vex him; he kills it at once. Is he at a meeting of any sort, or a festival, he flies into a passion, gives and receives blows, and goes away covered with blood. On the other hand, the possessor at adult age, of a large fortune, he manages it in a proper manner, discharges his other duties towards society, and renders himself conspicuous even, by acts of beneficence. He falls into a passion one day, with a woman who insulted him, and throws her into a well."

Mad'e, twenty-three years of age, married four years since, of a nervous-sanguine temperament, of great susceptibility, and a lively, cheerful disposition, experiences some slight difficulties. Her imagination becomes excited, and she, who was mild, good, faithful to her husband, devoted to her child, and very watchful over her household, becomes irritable; and a word arouses her passion, or melts her to tears. She neglects her husband, because he opposes her; and forsakes her infant, because business of importance calls her abroad. In her house, she throws every thing into confusion, because it is foul and disordered, and it is time that order and neatnesss should prevail. She speaks to the first that enters, against her husband, and accuses him of a thousand faults of which he is not guilty. Thoughtless in her discourse, she reveals secrets, which a woman usually keeps concealed. Imprudent in her movements, she exposes herself to unwarrantable suspicions, and if her husband or relatives desire to make any representations to her, she gets angry and pretends that they calumniate her. She suffers from frequent pains in her head, insomnia and constipation. The menses are scanty, and habitual colics are more severe at the menstrual periods, and some hysterical symptoms also complicate this condition.

She is committed to my care, and is, at first, very much composed and rational, complaining little of her family, who persist in believing her ill. But when the first impression of isolation has ceased, and she has become familiar with her new habitation and associates, her diseased activity is renewed. She puts every thing in her apartment in disorder, and is constantly displacing the articles which furnish it. She is dissatisfied, complains of every thing, and relates to one and another, a thousand falsehoods and calumnies; seeking to disseminate feelings of discontent, misunderstanding and disorder. It would seem as if the demon of evil inspired the words and acts of this patient. Do

* *Medico-Philosophical Treatise on Mental Alienation*, Paris, 1809, in 8vo. p. 150.

we demonstrate to her that she is in an error, that what she says is false, and that what she does is not right; she tries to justify herself, and is silent or angry. If, however, she is in society, she fashions her looks with so much care, that the best informed would regard her as very well. She takes part in the conversation, flatters, and makes friendly remarks to those concerning whom she had spoken unkindly in the morning or evening previous. She promises no more to disarrange her furniture, and to put in order those articles of her toilet which she uses. On the following morning, the same scenes, conversations and disorders, are renewed. Tepid baths prolonged, laxatives, and a little before the menstrual periods, sitting baths, with the infusion of camomile, and some leeches, to make up for the deficient menstrual flux, are the remedies employed. After the expiration of three months, during which we employ a few *baths of repression*, the menses flow abundantly. Sleep is better, and she is more composed. The same attentions continued, together with a severe repression, renewed if necessary, when the actions of the patient are too eccentric, and her discourse highly improper; at length effect a cure, after six months' treatment.

Mad'e C., tall, of a nervous temperament and warm imagination, has always enjoyed excellent health. A tender wife and excellent mother, she is much engrossed with her household and commercial affairs. When forty-one years of age, she loses one of her children, is profoundly affected by it, and some days afterwards, to sadness succeeds agitation, her imagination becomes excited, her susceptibility more acute, and her affections, tastes and habits, change. Soon after, she becomes more active, thinks she possesses a superior understanding, and is a victim to the ignorance of her husband; who, knowing nothing of business, would have been ruined without her. She opposes her husband, insults him, and at length conceives an aversion for him. She neglects her affairs, her children and household. She is running about every where, wearying all, by her loquacity and pretensions. She repeats her complaints, even to strangers; as well as her projects and expectations. Dissatisfied with every thing, she wishes to make a clean house, and displaces all her furniture, makes extravagant, and even ridiculous expenditures, entertains an increasing dislike towards her husband, and wishes to desert the conjugal mansion.

She is committed to my care in June, 1822. Mad'e C. is constantly in motion; constantly speaking of herself, of her mind and capacity. She recriminates all others, and particularly her husband. Every thing displeases her, both persons and inanimate objects. Her vanity, and the perversion of her affections, the change of her disposition and habits, are allied to a semblance of reason, which imposes upon those who see and hear her for the first time, and for a few moments only; as she has ever motives more or less specious, to justify her sentiments, conversation and acts. She does not sleep, eats little, suffers from constipation, and complains of no pain. There is something convulsive in her physiognomy, and the aspect of her countenance. Convinced that she enjoys perfect health, she refuses all medicine, isolation and the baths; and counsel, imperfectly appreciated, and unkindly received, has alone been employed. After the lapse of two months, she becomes more composed, sees her husband with gratification, and, although still more active than in a state of health, returns to her family, and resumes her former habits. Since this period, every year, about the vernal equinox, her excitement is renewed, and sometimes isolation is necessary.

At the age of forty-nine years, she is brought to Charenton in the month of July, 1830. At the time of her admission, her activity is excessive, and her loquacity exhaustless. She fatigues, by her pretensions to superiority of understanding, and capacity. She treats the inmates with disdain, as well as the officers, domestics and servants of the house. She complains of all. She

accuses her husband of possessing a narrow understanding, and boasts of having predicted his ruin. Certain hysterical notions, and jealousy, blend with these reproaches. Drawn away by the necessity of speaking ill, she supposes wrongs, evil designs and faults, and relates them to one and another. She perverts whatever comes to her knowledge, in order to indispose, irritate, and embroil among themselves, the people of the house. Does she speak of her husband, it is with contempt; affecting, for his sake, a disdainful pity. She is also indifferent towards her children. Dissatisfied with her apartment, she often demands permission to change it; displaces all the articles which she employs, neglects attentions with respect to cleanliness, and makes her toilet imperfectly, accusing the maid-servants of negligence. In her insolent discourse, she spares no one, unless they treat her with severity, and are prepared to punish her errors. At the termination of her attack, the patient is peaceful, renders justice to all those whom she has calumniated during its continuance, recovers her affections, and resumes her regular habits, both with respect to conduct and language.

In the month of June, 1835, when fifty-four years of age, she is again admitted at Charenton. At the commencement of this attack, she abandons herself to graver errors than in the preceding ones. She is less agitated than during her first residence in the establishment, but is more deceitful, in the hope of more promptly securing her liberty. She writes to the prefect of police, to magistrates and lawyers, letters so methodically drawn up, as to deceive the persons to whom they were addressed; a circumstance which imposes upon me the necessity of making out certificates, giving an account of the mental condition of this lady, and the change in her affections and disposition, in addition to the disorder with respect to her language and actions. Anomalies of menstruation have in no way modified her physical health, which is good, excepting an abundant leucorrhœa and insomnia. The character of the delirium is similar, in all respects, to the symptoms observed during the previous attacks.

During her seizures, she restrains herself in the presence of strangers, and persons whom she wishes to convince of her sound intellectual and moral health. She never utters a word before them, respecting the articles she has displaced, nor any thing unbecoming. All her conversation and actions are under the control of motives. She overwhelms with taunts and disdain, those whom she regards as feeble; but yields, so soon as they offer an energetic resistance. She dissembles, and has recourse to falsehood, the better to deceive, and more securely accomplish her purposes. She spreads abroad discontent, insubordination and disorder. She has been a real scourge, in the various establishments in which she has been placed, since her first attack. The functions of organic life have never been appreciably changed, and after each attack, on recovering her natural condition, she renews her excellent sentiments, and resumes her habit of composure, order, and regularity of conduct.

M. W., a corn-merchant and baker, had a mild and retiring disposition, was apt in business, honest, religious, regular in his conduct, and obliging to every one. The worthy father of a family, he cherished with extreme fondness, both his wife and children. Although of a delicate constitution, he was never sick, but avoided very violent exercise, thinking that he could not support it. When forty-five years of age, he met with considerable losses, which affected him deeply, and permitted himself to sink into discouragement and dejection, at the same time that he makes strenuous efforts to triumph over this misfortune, and recover his former position. After some time, he obtains a recompense for his labors. It was not long after this period, that his friends remarked, that his spirits were unusually elevated. He extended the circle of his business, for which he manifests a greater capacity than formerly. He

exercised greater skill in his purchases and sales, and never permitted an opportunity for a lucrative operation to escape him. He made longer and more frequent journeys, and neglected the religious duties of the Sabbath. The effort, both of body and mind, to which he subjected himself, alarmed his friends.

Some months subsequent to this change in his habits, his relatives desired to represent to him, that his long journeys, made with reference to uncertain enterprises, prevented him from occupying himself with his affairs at home, which were more sure, and more advantageous. He assumed an imperious tone, and expressed sentiments which he had never before entertained. Still there was no lesion of his understanding. In vain do they repeat, that he exposes himself to the danger of compromising his fortune a second time, and of impairing his health. His disposition has become irascible and imperious; and he can no longer endure the slightest contradiction. The smallest obstacle to the accomplishment of his projects, irritates him. Nevertheless, he continues the same way of life for ten months, when a great change takes place in his sentiments towards his family. He no longer remains with his wife and children; eulogizes whatever he sees elsewhere, and finds fault with whatever transpires in his own house. His own, are less intellectual than the children of his neighbors, and his wife is less orderly in her household arrangements, than other women. He begins to partake of strong drinks, contrary to his habits; offering as an apology, his engrossing occupations and fatigues. He associates with strange women, which provokes a violent crisis, on his wife's venturing certain expostulations. He becomes irritated, and defends himself with much warmth; utters very serious menaces, quits his house, abandons his family and business, and goes into the country; sleeping during the day, and doing scarcely any thing.

Committed to the care of Doctor Hitch, this physician observed, that his countenance was animated, his eyes lively and changeful, his look uncertain and restless; head hot, and hair harsh; tongue *loaded;* stools unfrequent; the extremities of the limbs cold; the skin of the hands of a softness, *peculiar to nervous persons;* pulse full and tense. The patient was very active, often changed his place, and disturbed the furniture of his apartment; formed projects; speculated; and purposed to make long journeys. He was incessantly talking, yet his conversation was rational, nor did he employ any malevolent expression, not even against his relatives or friends. However, he appeared more than usually agitated, when the conversation turned upon his wife and children. He was well aware that he was in a hospital, knew the cause of it, and manifested a dislike towards no one. He felt that within some months, a great change had taken place in him, but that his physical health had improved. He admitted the strangeness of his conduct towards his family and relatives, without either approving or censuring it. He was accustomed to speak with much good sense, of his business; but if at liberty, would have expended his money, for at least useless acquisitions. Did he converse with any one, he gave the most minute account of his actions, without mistaking with respect to dates; but, by himself, both his language and conduct were absurd.

This case, which was reported by Dr. Prichard, is remarkable for the progressive change, first of the habits, and afterwards of the affections of the patient. After his restoration to health, he remarked to his physician, that the idea of his insanity presented itself to his mind, the moment he entered the establishment, under the direction of Doctor Hitch.

One of my friends, of a sanguine temperament, says Dr. Hitch, possessed a lively imagination, great sensibility, and very elevated sentiments. He was distinguished at the bar, but was exceedingly impatient, often fell into a pas-

sion during a discussion, and became violent when opposed. He received a public affront, from persons who were greatly indebted to him; an event which embittered the remainder of his existence. Although of a mild and generous disposition, he always retained a resentment against the persons who had injured him; sought every opportunity to thwart their plans, and to beset their path with difficulties. Did he meet them in society, their name alone was sufficient to make him redden. He frowned, and his physiognomy expressed the agitation of his mind. Two years afterwards, he had not succeeded in controlling these sentiments, and died of an apoplectic attack. During the two years that this disorder lasted, the patient suffered from sudden attacks of headache, succeeded by convulsions. There was never any lesion of the understanding, and he was accustomed to admit, that the feelings of aversion which controlled him, were entirely opposed to his religious principles, but that he could not surmount them.

An intelligent and prudent merchant, enjoyed the perfect use of his reason, until the age of forty-six years. He had, at this period, amassed a considerable fortune; the fruit of his own industry. He loves his wife, and becomes progressively so avaricious, as to deny himself articles the most necessary to the maintenance of life, and falls sick for want of sufficient nourishment. He was frightfully emaciated, and his body covered with an eruption. The sick man dwelt in a filthy and miserable chamber, permitting himself to want for every thing. Before leaving this chamber, from which he had not gone for a long time, this wretched being fixed his eyes upon an old coffer, which occupied a corner of his lodgings, in which were found bank notes for a considerable sum. This patient, was rapidly restored in a hospital, where he breathed a pure air, was well nourished, and took exercise. A few days after being set at liberty, he married. After a few months however, his new wife was unable to endure the caprices of her husband, who, it was perceived, was afflicted with mental alienation. In fact, his understanding had undergone a complete change. This patient, at first manifested only a change in his moral habits, characterized by such a degree of avarice, that he refused himself the necessaries of life. At a later period, the severity of the disease increased; the symptoms no longer permitting an intellectual form of insanity to be mistaken.

M., the son of a merchant, received a good education, and was regarded as a highly respectable scholar. He had, however, so great a distrust of himself, that he feared to recite his lessons; believing that he did not know them. His education completed, he commenced business with his father, who assigned him a handsome allowance. He seemed to enjoy himself, when he unexpectedly announced to his father that he no longer wished to deceive him; that he felt that he had not the capacity necessary to fulfil his duties, and that he was injuring the business. The contrary however, was true. The relatives of this young man exerted themselves to inspire him with confidence; but he was accustomed to reply; "My brother has more talent than myself. I shall never fulfil, in a proper manner, the engagements connected with my employment." His father, who was a man of judgment, proposed to his son a change of residence and occupation; and sent him to Manchester to make some large purchases. The latter fulfilled his mission most successfully. He soon however relapses into his former self-distrust, and complains anew of his incapacity, on resuming his former occupations. The same fears of injuring the business of his father revived; he renounced the advantages of home, and departed secretly for Liverpool, with the intention of embarking for America. Unable to accomplish his purpose, he was compelled to return to his family. Soon after, he made a new attempt at evasion. On being reinstated in his father's house, he poisoned himself. At length, on being committed to the care

of Dr. Hitch, the latter recognized in the patient, a man well adapted for business, intelligent, active, prudent; acquainted with merchandise, a good accountant, and possessing an excellent judgment. Three months suffice to restore this young man to such a measure of health, as to enable him to return to his family; where, for a year, he engaged in business in a very satisfactory manner. He then, once more lost all confidence in his capacity, and left his relatives; since which period, he has several times absented himself from home. They permitted him to gratify his caprices, with respect to changes of place, when suddenly, his feelings became materially altered. He avoided his father, addressed him hastily, and conversed with him only in an angry manner. He was also suspicious of the other members of his family.

The four preceding cases are borrowed from the work of Doctor Prichard, who reports them as examples of *moral insanity*. This learned coadjutor, who published in 1822 an excellent work on diseases of the nervous system,* has since enriched science, with the most complete work we now possess on mental diseases.† This skillful physician, by means of a series of very interesting observations, has unfolded the signs of that variety of partial delirium, in which the disposition, habits and affections of the sick, undergo a change, without being attended by any lesion of the understanding. Doct. Prichard has not, perhaps, sufficiently distinguished *moral insanity*, from another variety, which is also exempt from disorder of the understanding, and which Pinel denominates mania without delirium, and of which I shall speak in the succeeding chapters.

Mad'lle F., thirty-four years of age, is tall, with auburn hair, blue eyes, flushed face, and sanguine temperament. She is of a gay disposition, and mild temper. Trained to a knowledge of commercial affairs from her earliest youth, she feared to wrong others. At a later period, whenever she made out an account, she feared lest she might be deceived, to the prejudice of those, with reference to whom the account was made. She was accustomed to make frequent visits at the house of her aunt, without her hat, and with an apron which she was accustomed habitually to wear. One day, at the age of eighteen, without any known cause, on going out of the house of her aunt, she is seized with disquietude, lest she might unintentionally carry away in her apron, something belonging to her relative. From henceforth, she makes her visits, without wearing her apron. At a later period, she spends much time in completing the accounts and invoices, being apprehensive of committing some error; of substituting one figure for another; and consequently, of wronging purchasers. Later still, she fears that by handling money, she shall retain *something of value in her fingers*. In vain do they object, that she cannot retain a piece of money without perceiving it, and that the contact of her fingers cannot alter the value of the money which she touches. That is true, she replies, my disquietude is absurd and ridiculous, but I cannot prevent it. I must lay aside business. Her apprehensions gradually augment, and become general. When she places her hands upon any thing, her disquietudes are renewed, and she washes her hands in much water. When her garments rub against any object whatever, she is disquieted and tormented. Is she abroad? Her whole attention is engrossed in her endeavors to touch nothing, either with her hands or her clothing. She also contracts a singular habit. Whenever she touches any thing; whenever her garments have been in contact with a piece of furniture, or any other object; when any one enters her apartment, or she herself makes a visit; she shakes her hands rapidly; and

* *A Treatise on Diseases of the Nervous System*, London, 1822, in 8vo.
† *Treatise on Insanity, and other Disorders affecting the Mind*, London, 1835, in 8vo.

rubs the fingers of either hand with each other, as if endeavoring to remove some very subtle substance from beneath the nails. This singular movement is renewed every moment of the day, and on all occasions. Does she wish to pass from one apartment to another? She hesitates, and while hesitating, takes every possible precaution to prevent her dress from touching either the doors, walls or furniture. She is extremely cautious with respect to opening doors, windows, ward-robes, etc: *something valuable* might be attached to the keys, or knobs which serve to open them, and remain upon her hands. Before sitting down, she examines her seat with the greatest care, and shakes it even, if it be movable, to be certain that nothing precious attaches itself to her garments. She cuts off the hems of her linen and dresses, for fear that something might be concealed in them. Her shoes are so tight, that the skin extends beyond the border of them, and her feet swell and cause her much suffering. Her motive for inflicting this torture is, to prevent any thing from entering her shoe. Her disquietudes are sometimes during the paroxysms carried so far, that she dares touch nothing, not even her food. Her waiting-maid is obliged to carry her food to her mouth. After many periods of remission and exasperation, continued many years; after having tested the inadequacy of the advice of her relatives and friends, as well as her own reason, she decides to come to Paris in Nov., 1830. Isolation, the care of strangers, and the efforts which she makes to conceal her disease, sensibly ameliorate her condition, but her sorrow in consequence of having left her relatives, and her desire to see them, determine her at the expiration of two months to return to her family. There, by degrees, all her disquietude and madness return. After some months, she voluntarily leaves the residence of her parents, to reside in the family of a skillful physician. Her apprehensions again, for the most part leave her, and also her strange habits. A year has hardly passed, when the same disquietudes are renewed, as well as the same precautions. The paroxysm lasts for eighteen months. After a year's remission, another paroxysm recurs, and she comes to commit herself to my care at the close of the year 1834. During eighteen months, scarcely were the movements of her hands or fingers perceived, nor any of those other precautions which she had been accustomed to take. For the last six months however, (June, 1837), the phenomena have returned with still greater intensity, and increased from day to day.

In order to render this singular aberration more perfectly understood, I will trace her manner of life for a day. She rises at six o'clock, as well summer as winter. Her toilet usually occupies her an hour and a half, and more than three hours during the period of excitement. Before leaving her bed, she rubs her feet for ten minutes, in order to remove whatever may have insinuated itself between the toes or beneath the nails. She afterwards turns and re-turns her slippers, shakes them, and hands them to her chamber-maid, in order that she, after having carefully examined them, may assure her that they conceal *nothing of value*. The comb is passed through the hair a great number of times, with the same intent. Every article of her apparel is examined successively, a great number of times, inspected in every way, in all the folds and wrinkles, and rigorously shaken. After all these precautions, the hands are powerfully shaken in turn, and the fingers of either hand rubbed by each other. This rubbing of the fingers is performed with extreme rapidity, and repeated until the number of rubbings, which is enumerated in a loud voice, is sufficient to convince her, that nothing remains upon them. The close attention and uneasiness of the patient are such, during this minute exploration, that she perspires, and is almost exhausted by the fatigue of it. If, from any cause, these precautions are not taken, she is restless during the whole day. Her chamber-maid, who never leaves her, assists at this long toilet, to aid the

patient in convincing herself, that no *object of value* adheres either to her clothing or fingers. The affirmations of this woman abridge the precautions as well as the toilet. If they threaten to send in a second woman, the toilet is hastened, but the patient is uneasy during the whole day.

She breakfasts at ten o'clock. Before commencing her repast, she examines and shakes the napkins, plates, tumblers, decanters and knives. She also shakes and rubs her fingers, after touching the various articles of her service. It is the same at dinner. The presence of strangers does not restrain her. She eats with a kind of eagerness. Before retiring at night, she goes through the same precautions, and her evening toilet lasts more than an hour. During the day, she reads, or devotes herself to sewing; but is very careful to shake the books and the work before making use of them; and also, to shake her hands and rub her fingers, every time she touches these various articles. If she happen to pass her hands through her hair, over her person or garments, or place them upon any object that is near her, she shakes and rubs her fingers, as I have related above. She writes to her family, to give them an account of her condition, of what she is doing, of her plans, and expectations of a cure. Before commencing however, she shakes the paper, pens and ink-horn; never sealing her letters until her maid-servant has assured her that there is nothing in the folds of the paper. She never unseals the letter which she receives. During the paroxysms, she neither reads, labors or writes, but in presence of her waiting-woman; and if accidentally alone, even in her apartment, she does not sit down, until the servant comes in, and assures her that there is nothing upon the seat, to prevent it.

She pays visits, but on entering, scrupulously avoids touching any thing, balances herself about her seat, examines and shakes it, accomplishing all this with so much address, that she is not at first observed. Does she receive visits, she approaches an arm-chair, but immediately shakes and rubs her fingers. She makes journeys to her native city; but so arranges them, as to arrive at a very early hour in the morning, in order to have time to change her linen and other clothing, as well as to wash herself, before embracing her relatives when they rise. She is never irrational; is aware of her condition; perceives the ridiculous nature of her apprehensions, and the absurdity of her precautions; and laughs at and makes sport of them. She also laments, and sometimes weeps in view of them. She not only makes efforts to conquer herself, but also points out means, and even very unpleasant ones, which she considers as adapted to assist her, in overcoming her apprehensions and precautions. She makes her toilet with care, but without taste; purchases, but her waiting-maid pays; and she afterwards settles the account with her, and requires her to place her money in her secretary without touching it herself. She is fond of amusement; goes to the theatre, and visits public walks. She makes parties for the country, and every evening joins a social assemblage. Her conversation is gay, humorous, and sometimes mischievous. If however she changes her seat; if she puts her hand to her head, her person or dress; upon her own, or the chair of another; she shakes and rubs her fingers vigorously. She does the same, if any one enters or leaves the drawing-room. She enjoys, besides, excellent health. Her appetite and sleep are good. She sometimes suffers from pain in the head, and her face becomes flushed on the slightest emotion. She attends to all the medical suggestions that are proposed to her, but is opposed to baths, in consequence of the precautions which she is obliged to take, before entering the water, and on coming out of it. It would be impossible at any time, to discover the least disorder in the sensations, reasoning faculties or affections, of this interesting patient.

I shall doubtless be accused of having multiplied cases; but it was my desire to make this variety of insanity, which Pinel has denominated *reasoning*

madness, and Dr. Prichard *moral* insanity, but which is a veritable monomania, more clearly understood. Patients, affected with this variety of insanity, have in truth, a partial delirium. They perform acts, and hold odd, strange and absurd conversations, which they regard as such, and for which they censure themselves. Among them, some are turbulent, unsociable, and commit ridiculous and blame-worthy acts, contrary to their former affections and true interests. They find themselves uneasy everywhere, and are constantly changing their place. They both speak and do ill, through malice, from a want of employment, and from wickedness. Incapable of application, and averse to labor, they overturn, break and destroy. The perversion of their disposition renders them exceedingly troublesome to their families, and in those establishments, to which they are brought. At the Salpêtrière and Charenton, the admission of this class of monomaniacs is always dreaded; since, by their example and counsels, they destroy discipline and subordination, so necessary in institutions of this kind. Others are perfectly aware of their situation, discourse upon it pertinently, and desire relief. They are dangerous, neither by their conversation nor acts; and are only hurtful to themselves. They abandon the objects of their affections; leave their families and business, and compromise their true interests; always actuated by motives, more or less plausible.

The signs of reasoning monomania, consist in the change and perversion of the habits, disposition and affections. In that form of monomania, of which I spoke at the commencement of the chapter, it is evident that the understanding is disturbed, and that this lesion brings about the disorder of the affections and actions. In reasoning monomania, with which I am now occupied, the understanding is not essentially disordered, since it assists in the acts of the insane person, and the patient is always ready to justify his sentiments and conduct. Reasoning monomania has an acute and chronic course. We distinguish three periods in it. In the first, the disposition and habits are changed; in the second, the affections are perverted; and at length, in the third, a maniacal excitement appears, or else a weakening of the faculties more or less rapid, leads the monomaniac to dementia. This form of monomania is remittent or intermittent. It is subject to relapses, and is complicated with lypemania, hypochondria, hysteria, and especially paralysis. The treatment claims no therapeutic indication, differing from those which were pointed out, when speaking of monomania in general. But the management of the mind requires special attention, particularly with respect to isolation, which is not to be lightly prescribed. It is well to be apprised beforehand, that the vexations, and even the caution and advice which is given at the outset of the malady, hasten the second stage. Great prudence and experience also, are necessary, to control individuals affected with reasoning monomania.

Reasoning monomania ought to be studied with the more care, since those suffering from it know how to deceive the most skillful physicians; because they dissemble their condition, in presence of those who notice them, and have authority to decide on the question of their isolation; because they impose upon judicial magistrates in their legal capacity, when about to administer upon their persons or fortune; and finally, because they are often the subjects of medico-legal questions, which it is very difficult to resolve. I trust that for these reasons, I shall be excused for the length of the chapter on monomania.

MONOMANIA RESULTING FROM DRUNKENNESS.

In all times and places, men have made use of fermented drinks, and have abused them to a greater or less degree. Every people have their peculiar beverage, which they prefer to all others, and prepare from the productions of the soil where they dwell. In Europe, we drink cider, beer, wine and brandy. We also abuse these drinks. Their moderate use agreeably excites the moral and physical powers. Their abuse provokes delirium, then coma, sleep and stupor. These effects vary with a thousand individual circumstances, and with the quantity and quality of the drinks that are abused. The abuse of fermented drinks is more common at the north than in the south. In Russia, Sweden and Denmark; in cold and damp countries like Holland and England, they need excitement, to resist the influences of the climate. In North America, there die annually, says a public officer, 37,000 inebriates. In that country, intemperance produces three fourths of the crime and mental alienation; and we can say the same, with respect to the north of Europe. Children, women and old persons, are less exposed than adults of the male sex to the abuse of fermented drinks, and consequently, to their deplorable effects. The fatal propensity to drunkenness is sometimes hereditary. Gall relates, that in a Russian family, both the father and grandfather, early fell victims to their fondness for fermented drinks, and the grandson, from the age of five years, manifested a decided taste for strong liquors. Drunkenness, by disturbing the brain, impairs by degrees the understanding; enfeebles the organs of motion; leads to insanity; to *delirium tremens** and paralysis, which destroys so large a number of the insane. It leads also to suicide.

Whilst I was at the Salpêtrière, we had a servant, who had been a maniac, and was afterwards attached to the service of the division of the insane at this hospital. On the slightest opposition, this girl began to drink, and had recourse to a thousand expedients to procure wine, and could be prevented from obtaining it, only by seclusion. If she was not taken care of betimes, she became furious, or made attempts upon her life. Gall saw in the prisons at Bamberg, a woman who, so soon as she had drank, experienced a strong desire to set fire to some building. Scarcely had this irritation subsided, when she conceived a horror for herself. Nevertheless, she had been the cause of fourteen conflagrations before she was imprisoned.

But I am not to occupy myself in this place, with the abuse of fermented drinks, nor with its pathological effects. I have to prove, that if the abuse of alcoholic liquors is an effect of the degradation of the mind, of vices of education, and of bad examples, there is sometimes also a disordered condition of the system, which leads certain individuals to the abuse of fermented drinks. There are cases, in which drunkenness is the effect of the accidental disturbances of the physical and moral sensibility; which no longer leaves to man, liberty of action. The sick, who are thus affected, had formerly gentle manners, and habits of sobriety, but have suddenly changed. Some physical or moral cause has provoked this change; certain precursory signs have announced it. When the attack has terminated, the patients return to their former temperate habits. Relapses are frequent; are provoked by the same causes, and announced by the same phenomena. They sometimes recur at fixed periods. It is not unusual that, at the epoch of the cessation of the menses, women, feeling debilitated, desire to give tone to the system by drink-

* See on this important subject, P. Rayer, *Essay on Delirium Tremens*, Paris, 1819, in 8vo.—Leveillé, *Essay on the Insanity of Drunkards, or on the Trembling Delirium.* (Memoirs of the Royal Academy of Medicine, t. i. Paris, 1828, in 4to, p. 181).

ing strong liquors, and end with intemperance and its consequences. A merchant, for three years in succession, at the beginning of autumn, becomes sad, uneasy and morose. He neglects his commercial affairs, and is difficult and impatient, with respect to his domestic matters. In order to dissipate his moroseness, he at first drinks beer, and afterwards becomes intoxicated daily. He is then dangerous to his family. His wife is insecure with him, and his fortune is no longer safe in his hands. On the first approach of spring, he suddenly loses his desire for drink, which has tormented him during the whole winter, resumes his habits of sobriety, repairs by his activity the losses which he has sustained in his business, and endeavors, by his devotedness, to indemnify his wife, for the mortification he has occasioned her.

Mad'e has always been sober and regular in her habits. At the age of forty-two years, she experiences the first anomalies of menstruation, suffers from pains in her stomach, and spontaneous lassitude. With the hope of strengthening her system, she drinks wine, and feels at first relieved. She augments the quantity by degrees, and finally drinks without the knowledge of her husband and family. At a later period, she procures brandy, and drinks to intoxication, which compels her to remain in bed most of the time. She then abandons her usual occupations, no longer entertains any affection for her family, and becomes irritated and angry, if any one opposes her. This depraved habit existed for six years. The menses at length ceased to flow; and soon after, she recovers her health; conceives an aversion for strong liquors, and even wine; has resumed her habits of sobriety, and at the age of seventy-two years, enjoys excellent health. The daughter of this lady became insane at the age of thirty-two years. Her delirium is gloomy and sad in its character; and she is unwilling to eat any thing but bread, or drink any other fluid than water, in order to be able to succor the indigent.

Mad'e P., tall, of a nervous temperament, and agreeable exterior, with a gay, but foolishly vain disposition, has always enjoyed excellent health. The mother of a family, and in moderate circumstances, at the age of thirty-four years she enters, with her husband, an establishment, in order to superintend its affairs. On reaching the critical period, she begins to partake of alcoholic liquors, to combat the pains in her stomach. At a later period, she has recourse to brandy, and appears more active, intellectual and irascible. In the sequel, the abuse of liquors and brandy becoming habitual, she is almost constantly in a state of intoxication, and her faculties become enfeebled. At the age of forty-six, she retires into the country. Numerous occupations divert her from her deplorable inclination. A year subsequently however, she resumes her habit of drinking, giving brandy the preference, and is no longer fond of wine. She at length becomes sottish, and is persuaded to go and reside with her friends, whose position imposes some restraint upon her. She continues sober for six months, and recovers a good degree of fullness of habit and freshness of complexion. At the expiration of this period, renewing her former habits, she dies in two or three days, in a state of adynamia, without complaining of any pain, or her physician being able to discover the least derangement in any of the organs.

The wife of a merchant, about fifty years of age, very temperate in her habits previously to this period, began, at first, to drink wine, then liquors, and lastly brandy. Every evening, she was in a state of complete intoxication. Her taste led her, at length, to prefer Cologne water, and she was accustomed to drink from five to seven decanters of it, daily. After the lapse of a year, she became leucophlegmatic,—was frightened, in view of this condition,—suddenly laid aside the use of all fermented drinks, and died eight days after having taken this step.

Mad'e B., forty-two years of age, the mother of a family, of a nervous tem-

perament, and enjoying good health, when at the age of twenty-eight years, lost a daughter. Her thoughts become disturbed, she is sad, uneasy, and frightened at every thing. After some weeks, her health is reëstablished. When thirty-six years of age, without any determinate exciting cause, there is a return of the delirium, which presents peculiar characteristics. There is sadness at its commencement, a trembling and languor at the stomach, moral discouragement, and an incapacity to devote herself to the least exercise or occupation. At the expiration of six weeks, there is suddenly a general excitement, attended by insomnia. Agitation, and disordered movements, a desire to drink wine to excess, disturbance of the ideas, and perversion of the affections, characterize this state. After two months, the symptoms disappear, and the patient recovers, with reason, composure and sobriety. Since then, she has annually a similar attack. During the last year, 1836, she was bled three times at the commencement of the attack, which persisted, nevertheless, as long as the preceding ones, and terminated in the month of June. In the month of October following, she suffers from convulsions, and in the month of December there is a suppression of the menses, refusal to eat, and languor of the stomach. After some weeks, she makes an inordinate use of drinks, and suffers from insomnia, hallucinations, and a conviction that her enemies are exercising their hatred towards her. After the lapse of a month, there is a remission, but a return of all the symptoms immediately follows. On being sent to Charenton, April 24th, there is a cessation of the attacks towards the close of the month of May, preceded by a return of the menses. She conjures us to point out a means, by which the recurrence of an attack may be prevented, of which she entertains an equal degree of mortification and horror.

M. G., an advocate, aged forty-one years, is of medium stature, of a sanguine temperament, and has black hair and eyes. He has always enjoyed good health. For a few years past, he has been troubled with a cutaneous affection, which has spread over the entire surface, and gives to his hands the appearance of elephantiasis. His disposition is gentle, easy, and even puerile. In his youth, he had a fondness for alcoholic drinks, but never exposed himself to the habit of drunkenness. At a later period, he made an inordinate use of alcoholic liquors, and sometimes became intoxicated. Holding the office of summoner, he lost, on account of his habits, public confidence, and was obliged to sell his office. Having no longer any occupation, he spent his time and money in drinking to such a degree, that in the account which was made out respecting him, it is stated, that in one day he swallowed 171 glasses of brandy. For the year past, he has been accustomed to visit every evening, tippling houses of the lowest class, where he passed the night in company with the most abject beings. He was there arrested, and placed in charge of the prefecture of police, from whom he was taken, at the expiration of three months, on the demand of one of his aunts, who took pity on his condition, clothed him, made him promise never again to be guilty of similar excesses, and sent him into the country. He was not slow to renew his fatal habits, sold his effects, and disappeared. For some days, the family with whom he resided were extremely anxious respecting him, not knowing in what condition or place he could be. At length, he returned to the house of the same aunt who had previously sent him into the country, where, after having received both reproaches, and wise counsels, he resolved to come to Charenton; promising to conduct himself there in a proper manner. He was admitted, Jan. 4th, 1836. He is composed and polite. His manners are agreeable, his conversation interesting, and he occupies himself with literature. Do we refer to the consequences of his excesses, he blushes, seems to be mortified, excuses himself, promises repentance, and to resist his fatal inclination. He affirms,

with the accent of despair, that he is drawn away in spite of himself, the moment he sees a possibility of gratifying his taste for alcoholic beverages.

If I converse with him, after having represented to him how humiliating and dreadful his conduct is, for a man who has a good education, together with a wife and children; and convince him that his health has become impaired, and his understanding enfeebled; he appreciates the justness of my observations; thanks me for the expression of my good will towards him; weeps for shame and mortification; forms the strongest resolutions, and promises never again to go out of the house if he hereafter relapses into the same excesses. Notwithstanding his excellent sentiments and fair protestations; notwithstanding his promises, every time that we permit him to go out of the establishment, he restrains himself for three or four days only; after which, he drinks, and relapses into a state of complete drunkenness. If, after one of these excesses, he is restrained for some weeks, his conduct becomes regular again, and his reason perfect. He does not ask to go out, but after long privation, experiences anew a strong excitement, and there is no promise nor stratagem that he will not employ to obtain his liberty. He has recourse even to threats. Is there a power stronger than reason and the will of this wretched man, which leads him to the commission of excesses, for which he experiences the keenest mortification, whose frightful effects he deplores, and from which he promises to reform? All our efforts for the last eighteen months to assist this patient in gaining the mastery over this fatal inclination, have thus far been unavailing.

A lady still young, has been brought several times to Charenton, in consequence of the abuse of wine, and liquors which produce intoxication, the effects of which persist for several days. When the attack has ended, and she has recovered the use of her reason, she is ashamed, hides herself, and calls loudly for permission to return to her family. Hoping to assist in overcoming the inclination that controls her, we have administered the douche, have refused her permission to go out for several months, and have threatened to retain her all her life, if she exposes herself to be brought again to the establishment. She makes the fairest promises, and the firmest resolutions; but so soon as she is free, nothing can prevent the attacks.

From the facts which precede, who can deny that there exists a mental disease, whose principal characteristic is, an irresistible desire for fermented drinks? Observed with care, all the characteristic features of partial insanity and of monomania, will there be found. Whenever delirium or insanity are preceded by the abuse of fermented drinks, and especially drunkenness, we are disposed to charge this abuse with being the primitive cause of the cerebral disorders, though in many cases it is only the first, and sometimes the characteristic symptom of a commencing monomania. At one time, at the commencement of mental alienation, the stomach is in a peculiar condition, which causes the patient to suffer an excessively painful degree of physical prostration. It is then that this organ demands strong drinks. It is a disordered appetite; a real longing. At another, from the time of the invasion of insanity, the moral principle is prostrated, the patient is destitute of energy, incapable of thinking or acting; is overwhelmed by a sense of weariness and irritability of temper, and drinks, at first to excite, then to divert the feelings, and at length reaches intoxication. In both cases, the desire for drink is instinctive, imperious, irresistible. The patient seizes upon every variety of strong drink, and becomes irritated and even dangerous, if not gratified. This phenomenon is also a prelude to dementia.

This desire for alcoholic drinks persists during the whole paroxysm; after which, the convalescent becomes again sober, and resumes all the habits of a life of temperance. I have seen persons who, in the intervals of the paroxysms, felt a great repugnance to all fermented drinks, and partook only of

water. A young merchant, who was a native of Holland, whom I had in charge during an attack of mania, succeeding repeated excesses in the use of strong drinks; ten years subsequently stated to me, that since the attack from which he had then suffered, he had never been able to drink either wine or liquors. I have seen persons who, filled with despair in view of the state of degradation from which they had been raised, and into which they feared, lest they might again fall, demanded our services anew, to prevent, they said, this horrible malady.

I have elsewhere cited the example of an advocate who, unable to triumph over this fatal inclination, terminated his life by a violent death. Those who are afflicted with this form of monomania, yield to an influence which they have not the power to resist:—an influence which is the more imperious, in proportion as it has degenerated into a habit. Motives the most powerful; resolutions the most determined; promises the most solemn; the disgrace and danger to which they expose themselves; the physical pains which attend them; the chastisements with which they are threatened if they do not control themselves; the prayers and supplications of friendship; the tenderness of fathers, mothers and children; none of these, can divert these wretched beings from this deplorable propensity. What is the mode of action of the causes which, modifying the sensibility of the stomach, provoke an appetite for fermented drinks, among persons who had previously been sober and temperate? The modification of the sensibility of the stomach is evident, since the desire to partake of strong drinks ceases to be perceived, so soon as these causes no longer act.

In one of the cases reported in detail, the desire for fermented drinks is renewed for three years, on each successive autumn, and no longer return, when the patient is withdrawn from the influence of cold and moisture, by retiring to Italy, at the close of summer. In one of the preceding cases, the appetite for wine appears, with the first anomalies connected with the cessation of the menses, and is no longer perceived when menstruation has ceased, to return no more. A sort of moral reaction may also triumph over this fatal impulse. It is certain, that in many cases, the depraved taste of patients is induced by a general sentiment of debility, and tremors of the stomach. Might not a bitter, or some other tonic, be substituted for the wine, which, by changing the morbid action of the stomach, would put an end to the disease? It has been recommended, to mingle some nauseous substance with the wine, whose unpleasant taste might induce an aversion to the latter. For this purpose, the oil of turpentine has been proposed. The Spartans were in the habit of intoxicating their slaves, in order that the spectacle of degradation and brutishness, into which drunkenness had plunged them, might inspire the citizens with a horror of it. It is long since this means has lost its efficacy. Isolation has appeared to me, to be the only truly valuable precaution. It is necessary, by long habits of sobriety, to overcome the disposition to intemperance; and this triumph cannot be effected unless its victim fly the opportunities, and indeed, render it impossible to gratify it. Now, isolation alone fulfills these conditions. Instructions and religious precepts, the counsels of philosophy, the reading of treatises on temperance, the fear of physical and intellectual infirmities, the inevitable consequence of drunkenness, will be auxiliaries to isolation.

INCENDIARY MONOMANIA. (*Pyromania of Marc*).

Not having had an opportunity to observe particular facts respecting this form of monomania, I borrow what follows, from an essay on this subject, published by Doctor Marc.*

Man, the sport of his passions, becomes an incendiary through jealousy, and from a spirit of revenge. M. Marc states the case of a woman, who sets fire to a house near her own, through jealousy of another woman, with whom her own husband was accustomed to live, and in order to take vengeance on the proprietors of the house, who favored this misconduct. Two girls, one twelve and the other fourteen years of age, both servants, and dissatisfied with their condition, committed acts of incendiarism, in order to be relieved from service. Two girls, who were cow-tenders, one twelve and a half, and the other sixteen years of age, become incendiaries in order to obtain a release from an occupation which had been the means of loading them with reproaches, and which they likewise detested. Criminals commit acts of incendiarism, to conceal the traces of their crimes, or from some other motive.

The insane, in consequence of delirium, to procure their liberty, or to satisfy their vengeance, set fire to the house in which they dwell. I had charge of a maniac, who threw a burning fire-brand into his own bed, hoping to recover his liberty, amidst the confusion which it would produce. Monomaniacs obey hallucinations, illusions and fixed ideas, which determine them to commit acts of incendiarism, as others are determined to destroy their fellow-creatures or themselves. An insane man had placed himself upon some fagots, and was going to set fire to them, believing himself invested with divine power, and was convinced, that at his command, the flames would at once be extinguished. A young man had undertaken, during the heats of summer, a journey on horseback. His mind wanders; people press around him, and he thinks that he has fallen into the hands of robbers. He sets fire to the house into which he has been kindly received, in order to escape from what he considers to be a den of malefactors. A gentleman, forty years of age, thinks that he has enraged enemies, and fears, lest he shall be assaulted in his own house. He surrounds his apartment with a train of powder, resolved to set fire to it, so soon as his pretended enemies shall present themselves. Schlegel, in his work on political medicine (1819), relates that a woman, affected with religious melancholy, sought to commit suicide, by burning herself upon her bed. She manifested no intellectual disorder, with the exception of a distaste of life, and religious exaltation.

Jonathan Martin was brought before the grand jury of the county, for having attempted to set fire to the cathedral of York. When brought into court, Jonathan, whose appearance is cheerful, commences a conversation with those persons who surround him. Are you sorry for what you have done? a lady enquires. Not at all; if it were designed that I should do it, I should execute it still. It was very necessary to purify the house of the Lord, from the unworthy ministers, who are far removed from that purity, which is enjoined in the Gospel. But this is not the way to correct the priests. Martin smiled, and says, after a few moments' silence; "Pardon me, this will cause them to reflect. They will perceive, that it is the finger of God that directs my arm. Christians, who are thoroughly converted to the true religion, will find that I have done well. The Lord works mysteriously, and it is his will, that accomplishes whatever comes to pass, in heaven or on earth." The drums announce the arrival of the Chief Judge; "This is curious," says Martin, "one

* Annals of Public Hygiene and Legal Medicine, Paris, 1833, t. x, p. 357.—Memoirs of the Royal Academy of Medicine, t. iii, p. 29.

might imagine, that he heard the trumpets of the last judgment." In the court of audience, the solicitor-general declared, that he should withdraw another important accusation, which was joined to that of incendiarism. Jonathan was accused of having carried away the fringes of gold, and other precious things, which surrounded the pulpit. "You do well to withdraw the accusation of robbery, it is contrary to common sense. I had no intention of taking any thing, but an angel from God having commanded me to set fire to the church, it was necessary to strengthen myself by proofs, that I alone performed this act, that another might not be punished for it; or if you prefer it, might not suffer in consequence of it."

A servant girl, fifteen years of age, and suffering from nostalgia, twice committed the act of incendiarism, in order to leave her masters. She affirmed that from the moment of entering upon service, she was beset with the desire of setting something on fire. It seemed to her that a shade, constantly by her side, impelled her to this act. This girl suffered from violent pains in the head, and her menses were tardy. Henke, in the 7th vol. of his *Annals*, among many other examples, relates that of a girl twelve years of age, who thrice set fire to buildings, and purposely suffocated her infant.

A little girl twelve years of age, had suffered for some time previously from a cerebral fever, which had enfeebled her intellectual faculties. Notwithstanding, she entered the service of a farmer at Barkingside, near London; set fire to a bed in the house where she was at service, and informed the family, who promptly extinguished the fire. This child, on being interrogated by the magistrate, made the following responses to the questions that were addressed to her: "I did not think that I was doing mischief; I wished to see, if by bringing a lighted candle near the bed curtain I should set it on fire. I was curious to witness the effect of the flame, and supposed that it would be more beautiful than coals of fire, or a fagot burning in the fireplace. I entertain no dislike towards my master, and enjoyed myself very well, while at his house. I did not think that I was doing him an injury, by burning a worthless bed; he is rich enough to purchase another. I did not reflect that I committed a great crime by setting fire to the property of another person, and wished only to make a bonfire. Had I known that I should be hung for having kindled a bonfire, I should not have done it."

E. Platner* states, that the female servant of a peasant, had twice committed incendiary acts, incited by an internal voice, by which she was constantly harassed, and which commanded her to burn something, and then destroy herself. This girl affirmed, that she had regarded with composure and satisfaction, her first incendiary act. The second time, she hastened to give the alarm, and endeavored to hang herself. No other intellectual disorder was observed in the case of this girl. From the age of four years however, she had suffered from spasms, which degenerated into epilepsy. A violent epileptic seizure had preceded by several days, the second act. No obscure insinuation, no opposition nor mortification, had provoked this determination. She had hesitated for some days.

Persons who have fallen into a state of dementia, as well as idiots, in the absence of discernment, or through carelessness, sometimes become incendiaries. Malefactors often abuse the weak understanding of idiots, and employ these miserable beings to accomplish their fatal designs. Persons in a state of dementia, allow their clothing and furniture to take fire, before perceiving the danger which they incur, and the conflagration that menaces their habitation. The cases which precede, embrace all that class of persons, who are led away by some controling passion, or by disorder or feebleness of the intellectual faculties. Among the incendiaries who are insane, or whose minds

* Quæstiones Medicinæ Forensis, Lipsiæ, 1824, in 8vo.

have become weakened, some have hallucinations; the greater part obeying an impulse of greater or less intensity, and led away by motives more or less plausible in their character. These patients however, are not deprived of the faculty of reasoning, and their insanity may be classed among the forms of reasoning monomania. There are facts which demonstrate, that some incendiaries are moved by an instinctive impulse, independent of their will. This circumstance ought to bring this variety into the division which Pinel has denominated mania without delirium, and which I call *monomania without delirium;* because the act of incendiarism is, in these cases, the result neither of a passion, of a delirium, nor of a want of reason.

In the 7th vol. of the *Annals* of Henke, it is stated that a female servant, on returning from a dance where she had been much heated, was suddenly seized with an incendiary impulse. She experienced great anxiety during the three days of irresolution, which preceded the act of incendiarism. She declared that she felt, on seeing the fire, a joy, the like of which, she had never before experienced.

A young woman twenty-two years of age, was disturbed by an internal agitation, which urged her to the commission of some incendiary act, although she discharged her appropriate duties in a perfectly acceptable manner, according to the statement of her employers. This agitation increased greatly, if she passed any considerable time without seeing her lover, by whom she had had a child.

A girl, by name Choleau, was brought before the court of assizes of Seine-et-Marne, on suspicion of belonging to a band of incendiaries who, in 1830 desolated several departments of France. This girl, at the age of seventeen years, says her advocate, poor, and an orphan, who, from the age of six years had procured her own livelihood, seduced because advice and support was wanting in her weakness, and pregnant for seven or eight months; affirms with an accent of sincerity which leaves no room for doubt, that she has twice committed an incendiary act from the influence of instinct, and an irresistible necessity; the victim of suggestions, to which her state of pregnancy exposed her, together with the accounts of incendiarism, the alarms, and incendiary scenes, which filled the whole country around her with fear, and excited her disordered brain.*

An apprentice to the business of a wheelwright, eighteen years of age, and living in the country, committed sixteen incendiary acts, in the course of four months. He always carried with him a sponge, and a thread saturated with sulphur; and although, to satisfy his gluttony and pleasures, he might already have learned to steal, and was destitute of money, he always refrained from robbery during the conflagrations which he had kindled. He was not excited by any passion, but on the breaking out of the flames was greatly pleased, and his pleasure was increased by the sound of the bells, the lamentations, clamors, cries and confusion of the population. So soon as the bells announced the existence of a fire, he was obliged to leave his work, so violently were both body and mind agitated.

These cases demonstrate: 1st, that mental alienation, whatever may be the character of the delirium, leads some insane persons to the commission of incendiary acts; 2d, that there is a variety of monomania without delirium, characterized by an instinctive desire to burn. These two propositions need no demonstration. Here are the facts, which are sufficient to establish them.

[Enquiries have been instituted, and the experience of men of age and careful observation has been put in requisition, to establish if possible, by some further proof the existence of that form of insanity which is now under consideration. A number of

* Tribunitial Gazette, No. 18.

cases, the histories of which were well known, have been furnished; the mental condition of each individual for a considerable period previous to the commission of the incendiary act—at about the time of its commission—and subsequently, having been given. In one case only, was it possible to ascertain the leading mental traits of either parent. In seven cases of persons who had been guilty of the act of incendiarism, their average age did not equal eighteen years: the extremes being eight and twenty-eight years.

The mind in each of the cases referred to, was peculiarly constituted; a deep and abiding spirit of revenge being one of its marked features. In one case, a "diabolical love of excitement" was the cause assigned; yet subsequent manifestations of the above characteristic, led to the belief that it might safely be substituted for the cause assigned. In a second, repeated punishments were invariably followed by a prompt act of incendiarism. In a third instance, a reprimand was followed by an incendiary act. In a fourth case, a mind reckless of consequences and regardless of all moral considerations, which was characterized by a haughty defiance of all punitive treatment, and which gloried in braving the severest dispensations of justice, led its unhappy possessor, thrice to perpetrate the act of incendiarism. In one at least of the remaining cases, revenge was the dread agent in the production of this act. One of the remaining two, seemed to have become the willing slave of his wayward propensities, which an unwise training had rather cherished than subjected to a wholesome control. Their wretched victim has been led on from the commission of one act of incendiarism to another, and is now, as he has long been, the degraded and ruined inmate of a state prison.

Two only of the subjects referred to were girls; one of whom was fourteen and the other eleven or twelve years of age, at the time of committing the act with which they were charged. The elder was an orphan, and had been educated wholly or in part, at an asylum for this interesting and bereaved class of children. Respecting her parentage nothing was known. The younger was the daughter of a very dissolute and wicked woman, who had no settled abode; her perverse disposition preventing her from obtaining a support where known. Inheriting a similar disposition, rendered if possible more perverse by the example and treatment of her cruel mother, this little girl thought only how to wreak her vengeance upon any one who thwarted her designs, or subjected her to salutary restraints.

In both these cases however, judicious management, uniting great kindness and forbearance with incentives to obedience, to the exercise of prompt and decisive modes of discipline, has led to the belief, on the part of those who have long known them, after years of observation with respect to their mental operations and conduct, that a healthful balance has been secured to their minds, and that it is now safe to permit them to mingle in society, subject to the trials and privations incident to poverty and comparative ignorance.

The facts above stated, I have been at some pains to collect from authentic sources; and which, as the expressions of the opinions of men whose minds were unfettered by prejudices or peculiar theoretical views, are of much interest, and on this account I add them.]

From the facts which have been cited, one is surprised at the great number and age of the incendiaries belonging to the female sex, compared with the number and age of men, who are guilty of this act. This double result is true, with respect to the north of Germany, according to the observations published by German physicians. The same, however, is not true of France. M. Marc has collected, and compared the charges of incendiarism, reported in the Tribunitial Gazette, from 1825 to 1832, and has found that in France, the number of male incendiaries is greatear than that of women, and that adults are, among us, more frequently incendiaries than persons below the age of twenty years.

Nervous affections, says our co-laborer, are more frequent and peculiar, among German than French women; particularly the neuroses; which are connected with the first menstrual efforts. This results from the difference of climate, morals and habits, especially among the inhabitants of the country. See how M. Marc develops his views. "The physical education of the German peasant girl, and the peasant girl of France, is far from being the same. In the latter country, the peasant women live beneath a milder sky, and are habituated, from their earliest years to occupy, during the winter, abodes whose temperature is slightly elevated, but not hot; their nourishment is simple, rarely rendered stimulant by spices, and few are acquainted with heating drinks. Nothing therefore, diverts them from a distinctly marked course of life, or interferes with the sexual development, whose most essential sign, menstruation, manifests itself in a normal manner, assisted moreover, by the salutary influence of the climate. It is not thus in Germany, especially in its northern portions. The dwellings of the Germans are warmed by fires, which are kindled in stoves of immense size, upon and behind which, are sometimes, the lodgings of a part of the family. The heat is so excessive, during at least six months of the year, as to incommode whoever may visit an abode of this kind, without being habituated to the action of an atmosphere, at the same time, both hot and humid: for usually, the water, which serves for domestic purposes, and for cooking the roots destined for the nourishment of cattle and other animals, is heated to ebullition in vessels made of iron or brass, and fitted into the walls of the stove, the vapor of which, destroys the elasticity of the ambient air. Let us add to this cause of insalubrity, the frequent use of hot spiced drinks; as, for example, a stimulant soup, rendered aromatic with cumin or coriander; the employment of tea, weak it is true, but taken in large quantities; the custom finally, of sleeping upon beds, as well as beneath coverings of feathers; and we can explain how these influences, alternating promptly with the action of intense cold, often prolonged, excite, and in turn enfeeble the system; thus giving rise to nervous affections."

The German physicians have proved* that acts of incendiarism were more frequently committed by young girls, from nine, to twelve, fifteen and eighteen years, than by those of a more advanced age. (I have already remarked, that this is not true in France). They have tried to explain this singular result of their observations. Henke attributes this disposition, to the arrest and disturbance, connected with the development of the organs, and, as a consequence, to the arrest and disordered development of the physical and moral phenomena of puberty. The affections which are unfolded at this period of life, are common to the two sexes; but are far more frequent and marked, among girls than boys. They have their seat in the centre of sensibility, in the extremities, or in the different foci of the nervous system. They reveal themselves, now by spasms and convulsions; now by mental diseases. During youth, and the effort connected with the establishment of puberty; somnambulism, ecstasy, lypemania, nostalgia and suicide, are also observed. But it is not always easy to refer to this arrest, or trouble connected with the developments, the affections which depend upon them. It often happens also, that the physician imperfectly understands the source of these disordered and critical movements; that he regards them as morbid phenomena, and combats them, by a too energetic medication. They also interfere with nature in her operations. If we connect these considerations, with those which result from circumstances, amidst which, puberty is developed among the country girls

* *Researches, based upon the actual State, in Germany, of medico-legal doctrines, with respect to mental alienation, by Taufflieb. (Annals of public Hygiene and of legal Medicine;* Paris, 1835, t. xiv. p. 124.)

of the north of Germany, we shall clearly perceive, why the young women of that country are, during the early period of adolescence, more subject to *pyromania* than young men.

HOMICIDAL MONOMANIA.

Homicidal monomania, mania without delirium, reasoning mania of Pinel, maniacal fury of Fodéré. Crime and the passions, nerve the arm of the homicide. The arrangement of the facts, however, which appertain to this subject, constitute no part of my design. The insane attempt to take the lives of their fellow-beings. Some, having become exceedingly susceptible, as well as very irritable, in a fit of anger, smite, and slay those who resist them, or by whom they think themselves opposed. They destroy persons whom they regard, either rightfully or otherwise, as their enemies; from whom they deem it necessary to defend themselves, or on whom they must take vengeance. Others, deceived by the illusions of the senses, or by hallucinations, obey the impulse of their delirium. Some destroy, and relate the motive for their frightful determinations; assign a reason for their actions; and possess a consciousness of the harm they commit. Others, are the blind instruments of an involuntary, and instinctive impulse, which impels them to the commission of murder. Finally, we notice idiots who, for want of a development of the understanding, and ignorant equally, of evil and of good, destroy from imitation.

We have classed among maniacs, persons who appear to enjoy the use of their reason; and whose affective functions alone, seem to be in the wrong. These maniacs perceive, compare and judge correctly; but they are drawn as de, from the slightest cause, and even without an object, to the commission of acts of violence and fury. They are *irresistibly* impelled, they assure us, to lacerate and injure themselves, and destroy their fellow-beings. These wretched persons have a consciousness of their condition, deplore their situation, warn their friends to protect themselves against their fury, or place them where they can do no harm. Pinel, more than any other physician, has called the attention of observers to this fearful malady, which, in hospitals, they call *reasoning insanity*, and to which our illustrious master has given the appellation of *mania without delirium*. Fodéré admits this variety, which he calls *maniacal fury*.*

But does a form of mania really exist, in which those who are affected by it, preserve the integrity of their reason, whilst they abandon themselves to the commission of acts the most reprehensible? Is that a pathological condition, in which man is irresistibly led on, to the commission of an act which his conscience condemns? I think it is. I have seen a great many insane persons, who appeared to enjoy the use of their understanding, and who deplored the determinations, towards the execution of which, they were powerfully drawn; but all affirmed, that they experienced certain internal sensations, of which they could give no account; that the brain was embarrassed; that they experienced an inexpressible inconvenience in the exercise of their minds, and that this precursory trouble, was itself announced by physical symptoms, of which they preserved a distinct recollection. They experienced, the one, a consuming heat, rising from the lower part of the abdomen, even to the head; another, a burning sensation, attended by throbbings in the head; others still, affirm that an illusion, a hallucination, or a process of false reasoning determined them. I will explain myself by examples. One insane

* *A Treatise on Delirium, Applied to Medicine, Morals and Legislation.* Paris, 1817, 2 vol. in 8vo.

man, suddenly becomes very much flushed, and hears a voice, which says to him: *slay, slay; this is thine enemy; slay him, and thou shalt be free.* Another is persuaded that his wife betrays him. Her conduct, and the circumstances of the case, ought to remove his suspicions. But jealousy nerves his arm, and he attempts to smite her. The weapon falls from his hand, he throws himself at the feet of her whom he was a moment before about to sacrifice, deplores his jealous fury, makes the strongest promises, and the firmest resolutions to conquer himself. An instant afterwards however, his excitement is renewed. The mother of a family considers herself ruined: *her situation is frightful, nothing can change it,* and she is convinced that her children are destined to beg in the streets. Despair seizes upon her; she resolves to destroy them, and prepares herself to accomplish her design. At the moment of executing them, (maternal tenderness crying more loudly than despair), she exclaims; *my children, retire.* The examples related by Pinel, sustain those which I have just related.*

Nearly all the facts relating to *mania without delirium,* which have been reported by authors, appertain to monomania or lypemania; to that form of insanity which is characterized by a fixed and exclusive delirium. The irresistible impulses, present all the signs of a passion which has attained to delirium. The sick, whether furious or not, drawn away *irresistibly,* to the commission of acts which they disclaim, are sensible of their condition, reason respecting it as well as others, and form a correct judgment of it. They deplore the acts which they have committed, and strive to control themselves. At such times, do they not enjoy a lucid interval? Shortly after, a paroxysm succeeds to the remission. Once more, a prey to their delirium, these monomaniacs are hurried away. They yield, but reason no longer governs their actions. In obeying the impulse which impels them, they forget the motives which, a moment before, restrained them. They now notice nothing, save the object of their fury; like men who are the victims of a strong moral affection, and see nothing but the object of their passion. In the language of common life, we call this extreme state of the passions, delirium; and shall we say, that a like condition, in a state of mania, is free from delirium? I say that this opposition of the ideas, of the judgment and affections, to the actions, in this form of madness, is explained by the changefulness of the ideas and affections, which induce the mobility, which itself characterizes the maniacal impulses. The will vacillates successively between these two impressions. Those who are thus affected, are actually drawn away to the commission of an irrational act, and one which is revolting to nature, because they do not enjoy the use of their reason, and are in a state of delirium. Man no longer has the faculty of directing his actions, because he has lost the unity of his mind. He is the *homo duplex* of St. Paul and of Buffon; impelled to evil by one motive, and restrained by another. This lesion of the will, may be, with much propriety, compared with an oversight, and can be conceived of, as resulting from the duplicity of the brain, whose two halves, not being equally excited, do not act simultaneously. But it is invariably true, that what has been called reasoning insanity, mania without delirium, and maniacal fury, belong rather to monomania or to lypemania, and that the acts of fury and destruction, to which the insane yield themselves, are always the result of delirium, however brief we may suppose it to be.

Such was in 1818, when I wrote the article *Mania,* for the *Dictionary of the Medical Sciences,* my mode of interpreting the facts, relating to *homicidal mania,* published by Pinel, in his immortal *Treatise on Mania.* Since that epoch, I have observed cases of insanity without delirium, and have submitted

* A Medico-Philosophical Treatise on Mental Alienation, 2d Edition, Paris, in 8vo. p. 139.

to the authority of facts; as my essay on homicidal monomania, inserted in the translation of J. C. Hoffbauer,* attests. The cases which succeed, those which we may read in various chapters of this work,† and those which have been collected by French and German authors, who have written on mental diseases, and on legal medicine,‡ demonstrate, that if the insane, deceived by their delirium, hallucinations or illusions, destroy life; that if, victims to *reasoning mania*, they take life, after having premeditated and reflected upon the homicide that they are about to commit; there are other monomaniacs, who slay from an instinctive impulse. These last, act without consciousness, without passion, delirium or motive. They destroy, in consequence of a blind and momentary disposition, independently of the will. They have an attack of monomania without delirium. Observation demonstrates, that the insane who suffer from homicidal monomania, are, now of a gloomy, melancholic, capricious and passionate disposition; and now, remarkable for the mildness and excellency of their morals and habits. The state of the atmosphere, certain disorders of the organs of nutritive life, over-excitement of the nervous sensibility, vices of education, exaltation of the religious sentiment, the power of imitation, mortifications, and lastly, extreme misery, are the exciting causes of this malady. To justify these general propositions, it will be sufficient to present the following facts, which I have taken the precaution to abridge. When the terrible Klamsin blows, the Indian, armed with the homicidal steel, precipitates himself upon whatever he meets. The despair, into which a siege, long continued; a fatal epidemic, or a shipwreck without hope of succor, plunge men; makes homicides of friends, associates and fellow citizens who, a little before, lived in the most perfect harmony. A little girl three years of age, was often heard to curse the second wife of her father. At a later period, she desires the death of her step-mother; and when five years and three months old, makes her first attempts to destroy the wife of her father. A lady, of an imagination the more ardent, in consequence of her having, in very early life contracted the habit of novel-reading, and excessively unhappy, on account of the prolonged absence of her husband, desires to destroy her children, in order that they may not one day, experience a like misfortune.

A father immolates his son upon a funeral pile, in obedience to the voice of an angel, who commands him to imitate the sacrifice of Abraham. An officer, whose case I have already reported, and a vine-dresser, of whom Pinel speaks, wish to regenerate the world by blood. A mother slays her infant, in order to make it an angel. An unhappy father, a leader of the sect of the Momiers in Switzerland, assisted by the members of his family, causes his fanatical daughter, to submit to all the anguish and pains of crucifiction. Prohaska slays his wife and two children, because he believes that an officer pays his addresses to the former. A saddler, before committing suicide, desires to slay his wife, in order that she may never belong to another. A girl

* *Legal Medicine Relating to the Insane, and to Mutes;* translated from the German, by A. M. Chambeyron, with notes by MM. Esquirol and Itard, Paris, 1827, in 8vo.

† Suicide, and Homicidal Monomania.

‡ Hufeland und Osann, Journal der pratischen heilkunde.—Henke, Zeitchrift fur die staatsarznekunde.—Taufflieb, Annals of public Hygiene, 1835, t. iv. p. 124.—Gall, *On the Functions of the Brain*, Paris, 1825, in 8vo.—Georget, *Medical Investigation of the Criminal Trials of Leger, Fletmann, Lecouffe, Papavoine*, etc., Paris, 1825, in 8vo. *A Discussion, Together With a New Medico-Legal Discussion on Insanity*, Paris, 1826–1828, 2d part, in 8vo. Marc, *Medico-Legal Consultation, With Respect to the Girl H. Cornier;* Paris, 1826, in 8vo. *Annals of Public Hygiene, and Legal Medicine*, t. ii. p. 351; t. iv. p. 383; t. x. p. 357.—A Briêre de Boisment, *Medico-Legal Observations on Homicidal Monomania*, Paris, 1826, in 8vo.—Cazauvieilh, *On Homicidal Monomania*, Annals of Public Hygiene, t. xvi. p. 121.—F. Leuret, *Psychological Fragments on Insanity*, Paris, 1834, in 8vo.

named Sthrum, slays her best friend, to prepare herself for a happy death. A mother believes herself ruined, and desires to destroy her nursing child, in order that it may escape both disgrace and misery. An instructor at Edinburgh, destroys his wife and five children, but spares two pupils, who had been committed to his care. A similar event took place at Amsterdam.* All those monomaniacs of whom I have just spoken, suffered from a partial delirium; all were impelled to homicide by a motive, confessed and reflected upon; and the affections of all, were perverted or enfeebled. Such was not the case with those insane persons, who are the subjects of the following observations.

A woman who had been confined ten days previously, finds herself suddenly, and without motive, agitated by a desire to strangle her infant. The mother of four children, is impelled involuntarily to destroy them, and escapes this calamity, only by deserting her house. A female servant, every time that she undresses for bed, an infant committed to her care, is seized with an irresistible desire to eviscerate it. A mother is impelled to decapitate that one of her children, whom she loves with the greatest tenderness. A woman, at the period of menstruation, experiences a desire to destroy her husband and children. This desire is most active, when she sees them asleep. A gentleman reads a journal, in which are reported the details of the murder of an infant. On the following night, he suddenly starts out of sleep, with a desire to slay his wife. A woman cuts off the head of a child whom she scarcely knew, and is brought to trial for it. The trial is very extensively published, and produces, from the effect of imitation, many cases of homicidal monomania without delirium. In this last series of facts, the understanding, moral affections and will, exercise no influence. What therefore, is this formidable malady, which, sporting with the tenderest emotions of the soul, urges man to the violation of the most sacred of nature's laws, and leads him to slay his fellow man, and those who are most dear to him? These wretched beings are not irrational before committing murder, and when they do take life, are moved by no passion nor motive; they are drawn away instinctively. But if they do not reason incorrectly, can it be said that they are rational? Can we reconcile reason with the murder of that being who is most dear? A husband slays the wife whom he adores; a father, the son in whom he delights; a mother her nursing child, and that one of her offspring whom she loves with the greatest tenderness. We can understand this phenomenon, only by admitting the suspension, temporarily, of all understanding; all moral sensibility and volition. The following fact enables me more clearly to understand it.

A man, thirty-two years of age, tall, of a spare habit of body, a nervous temperament and mild disposition, has been carefully educated, and is a cultivator of the arts. He had suffered from a cerebral affection, of which he had been cured for several months. He has been in Paris for two months, and leads a perfectly regular life. He enters one day, the Palais de Justice, gains access to the hall of the Pas Perdus, throws himself upon an advocate, and seizes him by the throat. He is arrested, conducted to prison, and committed to my care on the same day with this event. At my first visit, which was made on the following morning, he was calm, tranquil, without anger or resentment, and had slept the whole night. On the same day, he designs a landscape. He remembers very well what took place, on the previous evening in the Palais de Justice, and speaks of it with indifference. He has however, no recollection, either of the motives or circumstances attending the act, and entertains no regret on account of it. He replies politely to my questions, without dissimulation, and with the accent of truth. "I went to the Palais de

* Gall, *Functions of the Brain.*

Justice, as I would have gone any where else, to the Palais Royale or the Tuileries, like an idler who was walking before me, without any intention or special purpose. Not only had I no ill will towards this advocate, but he was entirely unknown to me; nor have I ever had any interview or business with any advocate whatever. I do not understand how I could have met with a disaster of this kind. It might have taken place any where else, and I might have been directed to any other person." On my remarking to him, that nothing but an instantaneous attack of disease could explain this act; "you can explain it as you please," he says, "as for myself, I do not feel sick, and I am unable to say how this incident happened to me." During the three months that M. was subject to my observation, he was never for a moment inconsistent with himself, never delirious, and never committed an unbecoming act. He was polite and obliging to all; amusing himself in sketching, or reading serious books. He preferred solitude, but without affectation.

Sometimes, homicidal monomaniacs are agitated by an internal struggle between the impulse to murder, and the sentiments and motives that dissuade them from it. The violence of this struggle, consists in the strength of the impulse on the one hand, and the remaining intelligence and sensibility on the other. This is so true, that the insane often, whatever may be the character of the delirium, entertain feeble desires to commit murder, which are not sufficiently active to require obedience to them. In other cases, the desire to destroy is powerful, and is often renewed, and combated by the patient. With some, the impulse is more energetic still. An internal struggle arises, which troubles and agitates the sick person, and occasions frightful anguish. Finally, with a small number, the impulse is so violent and instantaneous, that there is no struggle; the act immediately following the impulse. This agitation, this struggle, and these agonies, which so often precede homicide, are the more energetic, in proportion to the degree of intelligence and sensibility that the patient preserves; as we have observed, while studying with care, all these cases of monomania.

Much more frequently than is supposed, even by physicians; the affective faculties of the insane are perverted, and indeed, entirely suspended. Men the most moral, possessing the mildest dispositions and the gentlest manners, and who were perfectly regular in their conduct, have confessed to me, that ideas of homicide had tormented them during their delirium, particularly at the commencement of their disorder. These deplorable impulses are provoked, neither by hatred nor anger, as with furious maniacs. They are on the contrary, spontaneous, fugacious, and foreign even, to the habitual delirium. They are not produced from without, either by conversations or acts. A former magistrate has often remarked to me, that nothing in the world would induce him to sit in a criminal court, after what he had himself experienced during an attack of insanity. The same confession has been made to me by a young man, whose social position requires him sometimes, to sit in a court of justice. Its persistence and obstinacy, as well as the manifestation of these fatal impulses, sometimes characterize homicidal monomania without delirium.

Homicidal monomania spares no age, since children from eight to ten years old, are not exempt from it. It is ordinarily periodical, and the paroxysm or attack, is preceded by symptoms, which indicate a general excitement. This class of patients experience colic pains, and a sensation of heat in the bowels and chest, attended with pain in the head. They suffer from insomnia; the face becomes red or very pale, the skin swarthy, the pulse hard and full, and the body affected with convulsive tremors. The patient usually makes an assault, when no external occurrence gives rise to the excess to which he yields himself. The act accomplished, it seems that the attack is

over; and some homicidal monomaniacs, seem to be relieved of a state of agitation and anguish, which was exceedingly painful to them. They are composed, and free from regret, remorse or fear. They contemplate their victim with indifference; and some even experience and manifest a kind of satisfaction. The greater part, far from flying, remain near the dead body, or concur with the magistrates, by denouncing the act which they have just committed. A small number however, retire, conceal the instrument and hide the traces of the murder. But very soon, they betray themselves; or, if not seized by the police, hasten to reveal the act; to relate its most minute details, as well as the motives of their flight.

Homicidal monomania should be treated like other forms of monomania. In those cases which I have related, some patients were cured, by means which acted on the abdominal organs. With them, the use of laxatives and purgatives, appeared to be more especially indicated. Monomaniacs who have accomplished their purpose, are rarely restored to health. I have never seen one who had perpetrated a homicide, that recovered the use of his reason. In their treatment, it is necessary to take suitable precautions, to prevent the consequences of the deadly dispositions by which they are actuated, both with respect to themselves and others.

Mad'e L. has an uncle who became insane in consequence of the excessive use of alcoholic drinks. The widow of a first husband, who was a surgeon, she married a few years afterwards, at the age of thirty-one, and was admitted at Charenton, Feb. 26th 1837. In stature, she is above the medium size, her constitution is strong, and her head remarkable for its rotundity, and the smallness of its size. Her hair is of a chestnut color, her brows slightly marked, her eyes, gray and small, are fixed and sparkling; and her neck, on which creep projecting veins, is short and large. She has always enjoyed excellent health, although treated for several syphilitic affections with mercury.

Her conduct has been very irregular and disorderly; although reverses of fortune, and the abuse of fermented drinks, are the exciting causes of her actual malady, which began in a manner perceptible to all, in the month of June 1836. She has always, however, had a proud and intractable disposition; an aversion to labor; a relish, from early life, for blood, and for meat, which she sometimes eats raw. Long since, she felt herself irresistibly inclined to homicide, in order to shed blood. She has been seen to cut in pieces, with an expression of joy, birds or other animals which fell into her hands. Marriage did not modify this horrible instinct. She abandoned her first husband, to run away with a young man, and at a later period gave herself up to the first comer.

She began to furnish evident indications of delirium one year since. Four months subsequently, the most furious mania burst forth, and she broke and tore in pieces, every thing within her reach, and gave herself up to the commission of acts of violence, particularly against her neighbors. After having spent the months of December and January, in the hospital of Montreuil, Châlons-sur-Marne, her condition not improving, they brought her to the residence of her mother, with the hope that the tender cares of her relatives, would modify this mortal perversion. The first days pass off without a storm. A new position, the civilities, and proofs of tenderness and devotion which were displayed, seemed to have soothed her delirium. But exigences increasing, which could not be met, she soon became an object of terror to her mother and neighbors, whom she overwhelms with insults and threats. Since her seizure, she has had several paroxysms, during which, she is noisy and furious; breaks every thing in pieces, and permits herself to be accosted by no one. Her looks, gestures and menaces, inspire fear. She repeats that a crime must be committed; and that she must slay her mother, and all who approach her. The human race must die, and the earth be inundated with blood. She has

hallucinations of sight and hearing; she sees blood running, which excites her; she hears voices that applaud her furious conduct, and this arouses her to crime. When composed, if any one converses with her respecting her unfortunate propensities; far from denying them, or being affected or irritated on account of them; she replies in a firm tone, and with words energetically articulated; raising her hand at the same time to her brow; "Such as this head is, good or bad, you will not alter it. Such is my organization; never, never will you make me, other than I am; in no respect more rational. Whatever your power; neither your cells, your quieting chairs, nor your douches will modify my will. Besides, I am content with my mode of existence." She enjoys excellent physical health; but has sometimes a little pain in the head, and heat in the occipital region; is awoke out of sleep by surprise, and with a desire to run about. Menstruation is regular; but each menstrual epoch is marked by an exasperation of all the symptoms. Cooling and laxative drinks, tepid baths long continued, cold water to the head, and a purgative from time to time, are highly proper; entire separation also, from all her relatives, the patient sometimes requires. Such are the means employed to combat this terrible malady, which impels this wretched woman to commit murders, even the murder of those whom she most tenderly loves.

M. P., thirty-two years of age, single, educated as a pharmaceutist, is of medium size, of a strong constitution, and sanguine temperament. His hair is chestnut colored, eyes blue, head large, neck short and large, and the shoulders broad. Whilst a student, he was remarkable for his intelligence, and for the variableness of his disposition. Now, he wished to be a soldier; now, a seminarist; and now, he aspired to the chief places in society. He was fond of reading philosophical treatises; and particularly, theological writings. On leaving college, he was placed with a pharmaceutist, where his conduct was without reproach, and his labors diligent. Shortly after, without any known cause, certain irregularities in his character were observed. He abused the confidence that had been reposed in him, became disgusted with his profession, and manifested a desire to become an ecclesiastic. Indifferent and disgusted with every thing, he abandoned himself to idleness. At length he left Paris, for the purpose of visiting his relatives, but instead of going to them, he ran about, here and there, in the country, without any object, and in such a state of excitement, that he was arrested and sent to the Bicêtre; where he passed several days, and was, at length, transferred to Charenton. During the first months of his residence in that establishment, he is composed, and his conversation scarcely betrays the disorder that pervades his thoughts.

After this time, agitation supervened; and certain emotions indicative of pride, manifested themselves. He is a grand seignior, prince, etc.; he also boasts of his excellencies. At a later period, he becomes the prey of various hallucinations. During the night, there once appeared to him, a colossal angel; who, after having taken from Napoleon his crown, advances majestically, and places it upon his head. At a later period still, he has intercourse with heaven. He affirms that he is a new Christ, and pretends, in order to establish his divine power, that he possesses the ability to perform miracles, and often exercises it. He controls the thunder, and holds the guardianship of the weather. He is superior to the physical wants of humanity, and can live for an indefinite period without food. He tells us, from time to time, that he must be crucified, and that he shall fast for forty days; and with this conviction, he has more than once, obstinately refused food, and we have been obliged to have recourse to the œsophagean tube; to the introduction of which, he yields without resistance. For several months past, he has experienced a very strong inclination to suicide and homicide; and for this double reason, requires the most careful supervision.

Twice he has been discovered in a dying state, having hung himself by means of his cravat; and violent impulses to suicide are constantly operating upon his mind. The physicians of the establishment, in particular the physician-in-chief, must be his victims, and he has thrown himself upon them, on four different occasions, with a precipitation and fury, difficult to oppose. If I ask the reason for these acts of violence, he replies in a calm and affected tone, that they compel him to smite them; and that I myself, have for two years past, provoked him to fall upon and destroy me. Sometimes he adds, that we shall, and must release him, and that it is necessary for him to slay some one, in order that he may be slain in turn. Previous to this period, his impulses to murder, were not directed against the other patients nor the servants. He does not constantly experience this cruel impulse, and his physiognomy is calm and tranquil. He often smiles; but his smile is a bitter one. He testifies some regret; but announces, that at a determinate epoch, he must administer the *cup;* must smite M. *Esquirol;* and close the scene with the sacrifice of his own person. He writes much, but his writings are a confused succession of sentences, religious, philosophical and political; the sentiments of each of which, are properly connected. With these sententious phrases are blended, and often recur, the following words; "*I am man, God, Napoleon, Robespierre altogether.—I am Robespierre, a monster, I must be slain;*" and elsewhere; I know not in fact, why God desires me, by all means, to exterminate every body.

In the midst of these terrible thoughts, he sometimes maintains an appearance of reason, which is calculated to deceive. He converses even, in a connected manner, and amuses himself in reading and writing; but his look betrays a want of confidence, and his lips quiver. His smile is sardonic, and he demands his liberty, in a tone which manifests his deplorable inclinations. Finally; the functions of assimilative life are executed in a proper manner; his habit is quite full; his sleep is usually peaceful; and he eats with a relish, when some odd notion does not determine him to abstain from all food. Baths, douches, purgatives and leeches; employed methodically, and at different intervals, have in no respect modified this malady. We have not been more successful with gentleness, kindness, and all our interest, in overcoming the fatal dispositions of this wretched being, who was admitted at Charenton, June 9th, 1835. We perceive, in the two cases we have just been reading, two individuals of different sexes, born with perverse inclinations, and a depraved nature. These dispositions, and this character, not having been improved by education, have, at the age when the passions first unfold themselves, gained the mastery over the understanding, and led astray the reason and conduct, to homicidal monomania.

A little girl is sent to nurse for thirteen months, in the country, two leagues from Paris. She is afterwards placed in charge of her grandmother, an aged woman, respectable and religious. At the age of seven years and a half, she is brought back to Paris, and spends some months with her father and mother. This child is very sad; never plays, laughs nor weeps; but always sits in a chair, her hands crossed, and if the eye of her mother is turned from her, abuses her own person. She is taught to read, sew and knit; but attends reluctantly, to instruction relating to them. Her stature is three feet five inches; her hair is a light chestnut color; her eyes black and lively, and she has a snub nose. Her mouth is small; her cheeks are plump and rosy; and her physiognomy agreeable and intellectual. From the age of four years, this child was accustomed to indulge in the practice of onanism, with little boys from ten to twelve years of age; and her removal from these boys, is the cause of her sadness. Unless they maintain a constant watch over her, she indulges alone, in the same practices. The attentions of her mother, reli-

gious instruction, and the advice of a physician, do not succeed in overcoming this fatal habit. Her mother falls sick in consequence of her grief, and this unfortunate little girl expresses regret, only because she is not dead. Had her mother died, she would have inherited her wearing apparel; would have refitted it to her own person, and thus have gone abroad in pursuit of men. If she had not destroyed her mother during her illness, it was because a watch had been set to prevent her from doing it. But, said her mother to her, if I should die to-day, I should rise again to-morrow. Our Lord rose from the dead.—I know full well, replied the child, that when one dies, he returns no more. Our Lord was raised from the dead, because he was the great God. My little sister and brother have never come back from the grave. —But how would you take my life, asks her mother.—If I were in a wood, I would secrete myself; cause you to fall by means of your dress, and then bury a poniard in your breast. Do you know what a poniard is? A gentleman left a book, in which it was related, that a woman sheathed a poniard in the heart of a man. This book had actually, by mistake, been left in the house. But if you should kill me, says her mother to her, what I have, would belong to your father.—I am well aware of that, and my father would cause me to be put in prison; but I wish to take his life also. This little girl has often said since, that she loved neither her father nor mother, nor her grandmother who brought her up.

Some months subsequently, on the occasion of the murder of a child, the little girl says to her mother; if I should kill you with a knife, I should have blood upon my garments, and it would be seen; but I should be careful to undress myself before committing this act. Eight days afterwards, she says that she had thought, in order that she might have no blood upon her clothing, she should employ, to kill her mother, the same poison that they were accustomed to scatter upon the grain in the fields. A neighbor, wishing to test the feelings of this wretched child, puts a paste formed from the finest flour in wine, saying that it was arsenic, and offers it to the child, who exclaims; I should like very much to give it to my mother, but do not wish to take it myself. She shuts her teeth and lips closely, when they endeavored to make her swallow it. Such was the moral state of this little girl, at the age of eight years, when she was brought before a justice of the peace, who questioned her, in the absence, as well as in the presence of her mother. Some months later, she was interrogated a second time.

Our learned and respectable associate, Doctor Parent-Duchâtelet, a victim to his zeal in behalf of humanity, and too soon removed for the welfare of science and the happiness of his friends; reports this case with all its details,* and wrote the following note respecting it. "This little girl was placed in a convent, through the instrumentality, and at the expense of the administration. Some months after her admission, she suffered from a pedicular disease. She was brought to her mother, and when cured, entered again the house, in which the public authority had placed her. She was a second time removed, in consequence of extreme prostration, which it was believed, presented the symptoms of scurvy. Admitted anew to the convent, she received a sort of education, which consisted in labor with the hands; there first partook of the communion, and was discharged, at the expiration of several years. This girl has now, December, 1831, at the age of fourteen years, been placed as an apprentice, with a polisher of jewels. She is adroit in the use of her hands, but knows not how to read or write. She visits her mother every Sabbath, and spends the evening with her; conducts tolerably well, is very submissive, and never speaks of her previous life. She is however, at all times,

* *Annals of Public Hygiene and Legal Medicine*, Paris, 1832, t. vii. p. 173 and following.

sad and taciturn, and never plays or amuses herself. She complains of the rude manner in which she was treated at the convent; and her mother is of the opinion that she still persists in the habit of onanism."

On the 7th June, 1835, I was consulted in behalf of a little girl, seven and a half years of age, of ordinary stature, having a pale skin, an abundant and thick growth of hair, of a blond color, her eyes of a deep blue, and the upper lip slightly tumefied, but presenting no symptom of scurvy. Her physiognomy has an expression of deceit; and her eyes are often turned towards the internal angle of the orbit, which gives to her countenance, otherwise pale, a convulsive aspect. Her understanding is well developed, and although the daughter of a laborer, she has learned to read and write. She was trying to read the title of a book, lying upon my desk, while her mother-in-law was giving me the following account; for at first, the little one would neither speak to me, nor reply to my questions. She listened to the statement of her mother with the most perfect indifference; as if it had reference to another individual. "I married my husband as his second wife, when this little girl was two years of age. We sent her to live with her grand-parents, who were much displeased at my marriage with their son, and often expressed their dissatisfaction in presence of their grand-daughter. The child was five years old, when my husband and myself went to visit his parents. They received me kindly; but the child, who testified great satisfaction on seeing her father, almost refused my caresses, and would not embrace me. Nevertheless, she returned with us to Paris. Every time an opportunity offered however, she was accustomed to scratch and strike me, saying; I hope you will die. When she was five years and three months old, I was pregnant, and she kicked me in the abdomen; at the same time expressing a like wish. We sent her back to her grand-parents, where she remained for two years more. On returning to us, at the age of seven years and four months, she began again to abuse me, and is incessantly repeating, that she heartily wishes that I may die, as well as her little brother, who was nursed abroad, and whom she had never seen. Not a day passes, on which she does not strike me. If I stoop down before the fire place, she strikes me in the back, in order to cause me to fall into the fire. She beats me with her fist, sometimes seizes the scissors, knives, or other instrument that may fall in her way, always accompanying her abusive treatment with the same remark; I wish I could kill you. Her father has often corrected her, and I have not unfrequently opposed him, but the child has never expressed a willingness to abandon her design. Her father once threatened to have her imprisoned. That, she replied, will not save my mother and little brother from death, nor prevent me from destroying them. After this account, which the child heard with coldness, I addressed her the following questions. Her replies were made without bitterness or anger; and with composure and indifference. Why do you wish to kill your mother? Because I do not love her. Why do you not love her? I do not know. Has she treated you ill? No. Is she kind to you? Does she take care of you? Yes. Why do you beat her? In order to kill her. How! In order to kill her? Yes, I desire that she may die. Your blows cannot kill her; you are too young for that. I know it. One must suffer, to die. I wish to make her sick, so that she may suffer and die, as I am too small to kill her at a blow. When she is dead, who will take care of you? I do not know. You will be poorly taken care of, and poorly clothed, unhappy child! That is all one with me; I will kill her; I wish her dead. If you were large enough, would you kill your mother? Yes. Would you kill your grand-mother, (she is the mother of the young woman, and is present at the consultation)? No. And why would you not kill her? I do not know. Do you love your father? Yes. Do you wish to kill him? No. Notwithstanding he punishes you? That is all the same, I will not kill him. Al-

though your father scolds and beats you, will you still love him? Yes. Have you a little brother? Yes. He has been sent abroad to nurse, have you ever seen him? Yes. Do you love him? No. Do you wish that he may die? Yes. Do you want to kill him? Yes. I have asked father to bring him home from his nurse, in order to kill him. Why do you not love your mother? I know nothing about it. I hope she will die. Where did you get such dreadful thoughts? My grand-parents and aunt, were accustomed often to say, *that my mother and little brother must die.* But is that possible? Yes, Yes. I wish to say no more about my plans. I will take care of them, until I am grown up.

This conversation lasted an hour and a half. The coolness, composure and indifference of the child, excited in my mind the most painful emotions. The step-mother of this little girl is young, her physiognomy mild, and her tone and manners are agreeable. She dwells in the neighborhood of the Garden of Plants, and enjoys a good reputation, as well as her husband. By my advice, this child was sent into the country, to the residence of some nuns, where she passed three months. Her grand-parents have again taken her.

This case is remarkable in more than one respect.

1. For the fixedness of the desire to destroy her step-mother, on the part of a little girl, eight years of age, who had nothing to complain of, according to her own confession.

2. On account of the age, at which this deplorable disposition was developed. The grand-parents of this little girl, dissatisfied with the marriage of their son, express their displeasure by violent language, without foreseeing the effect, which these sentiments may produce upon the mind of a little child, from two to five years old. What a lesson to parents, who know not how to restrain themselves, either in their language or actions, in the presence of their children, whose minds and hearts they corrupt from their earliest infancy.

On the 15th of June, 1834, in the little village of Bellesme, the dead body of a little child is taken from a well. Two days subsequently, they take from the same well, a child of two years and a half. A girl eleven years of age, known in the country by her very bad habits, never met children younger than herself, without beating them, or tormenting them in a thousand cruel ways. This little girl had enticed these two infants successively to the well, and pushed them in. These three cases are pregnant with meaning. Was it not the want of a due degree of moral and intellectual development, and the vicious education of these three little girls, that deprived them of the discernment necessary to appreciate the horrid nature of the acts which they committed? Did not the habit of onanism, contracted at the age of four years, impair their developments in the case of the first? Did not the inconsiderate conversation of the grand-parents make a profound and fatal impression upon the mind and heart of the subject of the second case? As for the third, nothing corrected the habits of wickedness, contracted in infancy.

A vine-dresser, thirty-five years of age, formerly a gunner, tall and slender, of a bilious-nervous temperament and a melancholy disposition, is subject to frequent attacks of epistaxis, and loses much blood in consequence of it. Exposed to the heat of a summer's sun, the nasal hemorrhages are suppressed. Since that period, for about a month, he has suffered from cephalalgia, and sadness; and abandoned his labor. At a later period, the patient thinks that he has been accused of committing crimes; is filled with despair, and tries to hang himself. He is bled from the foot and arm. He afterwards becomes furious; and during his delirium, endangers the lives of several members of his family. He renews his attempts to destroy himself on several occasions, and is brought to Charenton June 7th, 1837. At the time of his arrival, the patient is suffering from a general delirium. His physiognomy is

expressive of terror; his agitation continual; and during the intervals of composure, the patient is sad, gloomy and silent. All at once, he thinks he sees enemies in those persons who surround him, and hears a voice which is frequently saying to him; "Deliver thyself from these enemies." His countenance was then very much flushed, and his eyes injected. Suddenly, and without any provocation, he gives his neighbor several blows with his night vessel; throws himself upon him; and would have killed him, had not the attendants ran to his relief. The patient immediately becomes composed, and replies to the reproaches which they utter, that his two brothers appeared to him, and told him to get clear of this neighbor, who wished to injure him. On the day after this attack, he remembered nothing of what had passed the evening previous. He makes several attempts to murder different attendants, during his stay in the establishment. In the intervals of the paroxysms of panophobia and fury, he was peaceful, gave an account of his condition, and the motives of these fatal impulses. He sometimes demanded that they should put upon him the camisole, in order to prevent the calamities he might cause, although it would greatly irritate him to be thus confined. I learn from the patient, that he has been subject to epistaxis, and that it was suppressed before his illness. I ordered the application of leeches to the entrance of either nostril, without discontinuing the use of baths, cold lotions to the head, and laxative drinks. The application of leeches, repeated for twelve days, provoked on the thirteenth a nasal hemorrhage. On the fourteenth day, he had a very abundant epistaxis, which was renewed the same and the following days. The patient, who felt before these hemorrhages, a painful constriction at the root of the nose, found himself relieved of this symptom, free from the head-ache, and restored, almost spontaneously, to the use of his reason.

M. de L., a captain of infantry, thirty-four years of age, has a very strong constitution. His stature is above the medium size; his hair and eyes are black; his complexion slightly sallow, and his face flushed. He has an extremely kind disposition, and is very friendly towards his inferiors. His manners are mild and his conduct regular. In consequence of a thwarted inclination, he becomes sad, and more solitary. After the lapse of some weeks, he suffers from delirium, is furious, and at a later period, thinks that he has received from heaven, a commission to convert men. During an attack of fury, which bursts forth spontaneously, he strikes upon the head, the physician of the military hospital, where he is at first treated. After the disease had continued for six months, he was sent to Charenton. At the time of his admission, he appears slightly excited, his countenance is very much flushed, and his eyes injected. After some days however, the patient becomes agitated, and pretends to be endowed with prodigious strength: he is *Achilles; breathing forth strength and courage.* Some days subsequently, before any thing had betrayed his disposition to fury, he leaves his bed during the night, and cries with a stentorian voice; "*This is the day of vengeance.*" He arms himself with a pewter pot, and strikes the attendant who was near him, three blows with it upon the head, and would have killed him at that instant, if they had not run to his aid. As it was, he died a few days after, from the injury he had received. From that moment, his agitation, and efforts to free himself from the restraints that had become necessary; his cries, threats and fury, successively increase. He believes that he has been called of God to regenerate the human race, by the baptism of blood. Already he has slain twenty millions of persons, whom he has regenerated.

Belphigos is the celestial being under whose influence he acts. At each visit he repulses the questions relative to his health; assuring us that he was never better, and that he has no need either of a physician, or of remedies. He often invites me with composure, and with the accent of kindness, to ap-

proach him. "Approach that I may cut off your head; it is the way to insure your future well-being." What he said to me, he was accustomed to say to my colleagues, as well as to the attendants. This wretched man had, at times, a sentiment of his state, and deplored his awful condition. These ideas, although dominant and habitual, were not so exclusive, as to prevent his manifesting, for brief periods, some traces of maniacal incoherence. At times, he utters frightful howls; seeking to tear in pieces, and to bite whatever may be within his reach Sometimes also, he weeps. There were intervals of several hours duration, when he was composed and rational. Although supporting with the greatest impatience the camisole, which had been rendered necessary, to prevent the effects of his fatal impulses; and although he made violent efforts to free himself from it; he felt the necessity for its employment, and was sometimes reconciled to it. Derivatives acting upon the intestinal canal, in conjunction with baths, and sanguine evacuations, were the basis of treatment. Several times, the diarrhœa which followed the administration of purgatives, obliged us to suspend their employment. Notwithstanding the most anxious cares, and the most active treatment, the patient lost flesh with frightful rapidity. He suffered from a degree of debility, for which we were unable to account. During the last days of his life, very abundant mucous evacuations took place, which it was impossible to arrest; yet the delirium did not change its character. The whole body, suddenly assumed an icteric hue. Two days in succession, in the morning, he suffered from a chill, which was succeeded by an abundant perspiration. The tongue and teeth were coated with fuliginous matter; the nostrils were covered with a fine powder; the respiration was laborious; and the patient died, Nov. 26th, 1827, about one year after the invasion of the malady.

Necroscopy. The serous fluid contained in the arachnoid cavity, in the lateral ventricles, and the medullary substance of the brain itself, presents, with varying shades, the sallow hue of the integument. The gray substance is slightly injected. The serous membrane of the ventricles is sensibly granulated. The right lung is, to a great extent, hepatized. There exist cellular adhesions, between the pleuræ costalis and pulmonalis. The left lung and its membranes are perfectly healthy. The liver is voluminous and yellow. The gall bladder contains a black, viscous and thickened fluid, and encloses several jagged calculi of moderate size. The intestines appear externally, reddish and injected. The spine is in its normal state.

M. D., thirty years of age, is small in stature, with blond hair, blue eyes, and an ordinary fullness of habit. At the age of sixteen, he was suddenly seized with religious lypemania, and sent immediately to Senegal, where he was cured, at the expiration of six months. When nineteen, he had a second attack, which persisted for a year, when he returns to France. At twenty-two he marries, and is excessively jealous, even of his father-in-law; reproaching his wife, for preferring her father to her husband. Nevertheless, he continues his trade as a saddler, and enjoys good health, until thirty years of age. At this epoch, he has a third attack of lypemania, characterized by a fear of eternal condemnation, by extreme jealousy, and by several attempts to commit suicide. The patient is sent to Charenton, refuses to speak or to move, and rejects every variety of food. After a sanguine evacuation, a sinapism to the feet is ordered. The patient manifests no pain, yet when we remove the plaster, the epidermis of the superior surface of both feet is removed. The delirium ceases almost spontaneously. The patient speaks willingly, and submits to the regimen and prescriptions that are ordered for him. In thirty days, he is in a condition to enter upon the discharge of his accustomed duties, and resumes his usual labors. After some weeks, he becomes melancholic, and believes that he is lost. Notwithstanding, he labors vigorously. He frequently stops work, throws himself upon his knees, offers some prayers, composes

himself, and again commences his labor. Sometimes, tormented by his disquietudes, he runs to the neighboring church, confesses, and returns again, feeling perfectly secure and tranquil. At other times, convinced that he cannot escape the destiny that threatens him, he cries out to his wife to save herself, because he feels impelled to destroy her. After this warning, he throws himself upon a seat or bed, like a person terrified. His wife cannot approach him; her husband constantly desiring her to retire from him. He commands those at hand to bind him, and go after the guard, in order to prevent him from committing some great crime. The attack ended, this wretched man asks pardon of his wife. God, he says, has doomed me to eternal punishment, in consequence of the grief which I occasion you. He then submits to the treatment which is prescribed for him, although God alone can reverse the sentence of condemnation. If he desires to slay his wife, it is because he sees death ready to seize upon him, and does not wish her to survive him, to become the wife of another person. A cautery, applied to the neck; tepid baths, and gentle purgatives; have improved the health of this patient, whose paroxysms are less frequent and intense. The right portion of the coronal region, and the left of the occipital, are most salient. The head, measured from the cast which was taken after death, presents:

Antero-posterior diameter	7.40 in.
Transverse diameter	6.37 "
Circumference	26.37 "
Bi-temporal curvature	11.41 "
Fronto-occipital curvature	11.61 "

Mad'e T., forty years of age, the wife of a nursery-man, has a brother who has been insane. This woman is tall, stout, and has a sallow complexion. At the age of sixteen, she has a slight attack of melancholy. At seventeen, she menstruates for the first time. At the age of seventeen and a half years she is married, and subsequently became the mother of five children. Her first child was born, when she was twenty years of age. At the age of twenty-one years and nine months, she is confined a second time. She now assumes the duties of nurse, with the expectation thereby, of augmenting the means of subsistence for her family. During lactation, she is depressed in mind, and contemplates the destruction of her child. Still she continues to nurse it, for the space of two years, notwithstanding her fear, and dread of yielding to her fatal thoughts. Since this period, she experiences at times, a crackling sensation in her head, and often suffers from melancholy. Her disposition is reserved, uneasy, ambitious and avaricious. She occupies herself much, in the management of her household affairs, and goes abroad but little. When obliged to make a few visits, she cannot conceal the utter weariness which it occasions;—a circumstance which has often led to unpleasant feelings on the part of those whom she visited. When she converses with her husband, she speaks only of calculations, and matters which relate to the increase of their property. At the age of twenty-nine years, she experiences an intense desire, and a strong impulse, to destroy one of her daughters, on seeing her asleep; the girl is now eleven years of age.

The transition from a state of habitual health, to that of disease, takes place insensibly. Two moral causes appear to have provoked an actual perversion of mind. The first was, the opposition of her eldest son, who wished to become a butcher, contrary to the intention of his mother. Three years afterwards, on seeing him persist in his resolution, she goes to a fortune-teller, in order to ascertain the future destiny of her son. Presages of misfortune impress upon her thoughts a more melancholy character. She becomes more gloomy; more susceptible; more irritable: yet is not irrational. After the

lapse of fifteen months she becomes pregnant, and is grieved at its occurrence, after an interval of eleven years, and at her advanced age. She is informed also, that they had jested with her grown up children on the pregnancy of their mother. She at once begins to feel uneasy respecting her unborn infant, fearing lest she shall not be able to take care of it conveniently. Immediately after her confinement, although she experiences great pleasure at the kind reception which the new comer receives at the hands of her other children, she entertains ideas of infanticide, which persist, and are afterwards renewed with more or less intensity; and it is to prevent a crime, that she wishes to destroy herself. Several times does she seek to put an end to her days, pursued by the fear of destroying her child. She put it out to nurse when two months old; but not being able to refrain from seeing it, she is constantly visiting it, to take care of it, and to seek after its welfare. At length, at the expiration of a month, she takes it home again. A month has scarcely elapsed, when it becomes necessary to put out the child once more to nurse. Unable to see it, the patient often desires to hear of its welfare; and reproaches herself for not having kept it at home, and taken care of it there. Agitated by the thought and fear of slaying her child, she says; "It is better that I should die, *than this dear innocent.*" So intense was her disquietude, that she several times left the house of her husband, with the intention of terminating her existence. One month afterwards, she was found in her chamber, asphyxiated by the fumes of burning charcoal. "My child is, notwithstanding, a beautiful and lovely being. I adore it; but its caresses produce a strange feeling within me, and I start, without knowing why, whenever I approach it. I have an excellent husband, and ought to be happy. But now I reproach myself, with having abandoned my household and its duties, which formerly occupied and diverted me. I have offered prayers, but have not been heard with favor. Would that I could persuade myself that I were sick; but I cannot: I am a wretched mother."

Whenever, in conversing with this patient, and assuring her positively, that her fears with respect to slaying her son, are the result of disease, we succeed in convincing her; her countenance then becomes composed, and she renders a complete account of her sensations, and mental sufferings. It often happens, that she reproaches herself, in consequence of the food she has eaten. If she endeavors to eat; after taking a few mouthfuls, she abstains, and her mouth is habitually very dry. She experiences epigastric pains, and spasms in the throat; sleeps very little, and suffers from very severe colic pains; when her fears and despair are exasperated. I prescribed the whey of Weiss, and tepid baths, from which treatment there result abundant evacuations. Feeling very well, she wished to return home, contrary to my advice; but scarcely had she entered her house, when her torments respecting infanticide and suicide are renewed, and it was necessary for her again to enter the establishment, from whence she is discharged in good health, after a farther treatment of two months.

At the same time, during the summer of 1836, we had at Charenton, a woman from the country; a most excellent mother, but who had been harassed for some time, with ideas of infanticide, and who, moreover, like the patient of whom I have just spoken, was not irrational.

MANIA.

Description of the maniac, and his end unless restored.—Definition of Mania.—Mania briefly contrasted with Monomania and Lypemania.—Views of Heinroth and Prichard with respect to the connection between mania and fury.—Most frequent causes of mania.—Table of ages.—Table of professions.—Causes.—Tables of physical and moral causes.—Incursion of mania.—Symptoms.—Hallucinations.—Sensations perverted.—Case in detail with treatment.—Other cases.—Mania usually chronic.—Continued, remittent or intermittent.—Sometimes alternates with other diseases.—Examples.—Critical terminations.—Table of cures.—Table of cures relative to Seasons.—Table of the periods of mortality.—Remarks.—Post-mortem examinations.—Remarks upon.—Treatment.—Three periods characterize mania; treatment of each.—Restraint.—Food.—Pinel's cases with treatment.—Intercourse of physician with patient.—Visits of friends.—Convalescents.—Views and feelings of convalescents.—Their treatment.—Remarks on medication.—Medicines appropriate to the first stage.—Pinel's remarks on blood-letting.—Baths.—Cold to head.—Laxative drinks.—Enemata.—Exercise.—Diet.—Critical efforts to be managed cautiously.—Case illustrative.—Classification, its importance.—Quinine in intermittent mania.—Reasons for its occasional failure.—Treatment adapted to cases which result from the suppression of habitual evacuations.—Case.—Benefit of cold affusions, with cases.—Purgatives.—Camphor.—Opium.—Digitalis.—Bath of Surprise.—Submersion.—Rotatory machine.—Moxas.—Actual cautery.—Cases illustrating its effects.—Cups.—*(Farther remarks.)*

What a change has it effected in that man who, yesterday, to-day, and even a few moments since, engaged in the profoundest meditations, was accustomed to submit to his estimates the laws which govern the universe; who, in his vast conceptions balanced the destinies of empires; by wise combinations opened to his country new sources of prosperity; by his genius enriched the arts by so many master-pieces; and through the generosity of his sentiments perceives only the happiness of his fellow-beings? All at once he fails to recognize surrounding objects, and losing his own identity, lives only a chaotic existence. His disordered and menacing discourses betray the disturbance of his reason. His actions are mischievous; and he desires to overthrow and destroy every thing. He is at war with every body; and hates all that he was formerly accustomed to love. He is the very genius of evil, who delights in the confusion, disorder and fear which he spreads around. This woman, the image of candor and virtue, equally amiable and modest, whose lips were never opened but to utter mild and generous sentiments, who was a beloved daughter, a faithful wife and affectionate mother, suddenly becomes insane.

Her timidity now becomes audacity; her mildness is converted into ferocity. She utters nothing but abuse, obscenity and blasphemy. She no longer respects either the laws of propriety or humanity. Her nakedness braves all eyes, and, in the blindness of her delirium she threatens her father, beats her husband, and strangles her children, if neither a cure nor death put an end to such excesses. To a state so deplorable, yet a positive indication of life,—if the patient is not cured,—succeeds a calm, a thousand times more afflictive. The maniac sinks into an apathetic condition. There is no longer a conflict of mind; no more threatening. All recollections of the past are forever lost; all, at length, is merged in dementia, the tomb of human reason. This wretched being becomes an object of pity and disgust to his fellow-beings, who, in this deplorable condition, no longer recognize the man, because they no more perceive the exercise of reason. He stupidly drags out the remainder of his material existence, without thought, desires or regrets; sinking gradually into the grave.

Mania is a chronic cerebral affection, ordinarily unattended by fever, and characterized by perturbation and exaltation of the sensibility, of the understanding and will. I say usually without fever, because, at its commencement, and sometimes during the progress of the attack, febrile symptoms are observed which may deceive us, and render a diagnosis difficult. The countenance of maniacs is flushed, sullen or pale. It is shrivelled, the hair is crisped, and the eyes are injected, shining and haggard. This class of patients fly the light, and have a horror of certain colors. They suffer from a humming sound, and a tingling in the ears, which are sometimes very red; and the slightest noise disturbs them. Monomaniacs suffer from cephalalgia, and from heat within the cranium. They are also affected with anorexia, or a voracious appetite. Consumed by an internal heat, they are tormented by a burning thirst for cold drinks. They suffer also from heat in the bowels; from constipation and insomnia. If they sleep, frightful dreams trouble their repose, or they start suddenly out of their slumbers. Maniacs are remarkable for their false sensations, illusions and hallucinations, and for their vicious association of ideas, which are reproduced, with extreme rapidity, without order or connection. They are also remarkable for their errors of judgment; the perturbation of their affections; and in fine, for their freaks of volition. This class of patients possess great nervous excitability, their delirium is general, and all the faculties of the understanding are exalted and overthrown. Whatever makes an impression, whether physical or moral, even the empty products of their imagination, excite them, and become the subject of delirium.

Mania should not be confounded with lypemania, (melancholy without delirium), nor with monomania. In the latter, the delirium, whether sad or gay, concentrated or expansive, is partial, or circumscribed to a small number of ideas and affections. In lypemania and monomania, the symptoms are the expression of the disorder of the affections; whilst in mania, the phenomena are the result of the confusion of all the elements of the understanding. In mania, the multiplicity, rapidity, and incoherence of the ideas, together with the defect in the power of attention, exalt the passions of the maniac, occasion errors of judgment, corrupt his desires, and impel him to determinations more or less strange, unusual or violent. The disturbance of the understanding provokes the excesses of the maniac, as its immediate consequence. In lypemania, on the contrary, the source of the evil is in the passions. The sensations, ideas, desires and determinations of the monomaniac, are under the influence of a controlling passion, which absorbs all the power of thought. If maniacal delirium presents some degree of analogy to the erratic flights of genius; lypemaniacal delirium offers all the features of the passion in its physiological state. Is not this influence of the understanding upon the passions, an incontestable truth? Before desiring, it is necessary to know. The

influence also of the passions upon the understanding, is a truth as evident as the preceding. Who would dare deny this reciprocal influence of the understanding upon the passions, and of the passions upon the understanding! All authors, especially the ancients, apply the name of maniac to all those insane persons who are led by their delirium, to the commission of any act of violence or fury; a circumstance which causes us to confound, even in our days, mania with melancholy. Fury, however, is the anger of a man in delirium. Fury bursts forth in all forms of mental alienation, and even in idiocy, when the subject of it is violently opposed. It often manifests itself in an atrocious manner, both in lypemania and monomania.

Professor Heinroth, who has enriched with some very interesting notes, the German translation of my principal essays on insanity, by Doct. Hille,* censures me for considering fury as a symptom merely. He is of the opinion that fury is a pathognomonic sign of mania; because, says this author, it is constant and lasting in mania, which, without fury, is a contradiction. Doct. Prichard† coincides in opinion, with the celebrated Professor of Dantzick. Without doubt, maniacs, in consequence of their extreme susceptibility, are very irritable when in a state bordering on that of fury; but they are not at all times furious. In dementia, there is a weakening of all the faculties; and the delirium, affections and acts, disclose the feebleness of the organs; a circumstance, which distinguishes mania from dementia. An idiot is never mistaken for a maniac. In idiocy, the faculties have never existed, or have never been sufficiently developed.

The details into which we entered, in the article *Insanity*, permit us to abridge what we have to say respecting the causes, symptoms, progress, termination and treatment of mania. What are the most frequent causes of mania? With respect to the seasons, it is evident that mania ought to appear in the spring, and during the heats of summer. In the reports of the maniacs admitted during four years at the hospital Salpêtrière, from the month of March to that of August inclusive, I find, not only that the admissions are most numerous, but also that the admissions of maniacs are the greater, compared with those afflicted with other forms of insanity. The admissions of maniacs into my establishment, are more than doubled during the same six months of the year, when compared with the admissions during the other six. During the six months of spring and summer, those of June, July and August, are the months, during which mania appears most frequently. This influence of an elevated atmospheric temperature, on the production of mania, is equally felt in warm countries, where mania is more frequent than in temperate and cold climates. The influence of heat also modifies the progress of the disorder; that of summer ordinarily exasperating it. Maniacs, under these circumstances, are more agitated, more irritable, more disposed to fury; and this state is greatly protracted; whilst a sudden cold, attended by a dry atmosphere, at first agitates, but soon composes them.

That period of life, in which the vital forces act with the greatest energy, when certain passions exercise the most complete mastery over man, when the intellectual faculties possess their greatest activity, may be regarded as that especially appropriate to the development of mania. The delusions of the imagination, and the seductions of love, conspire to render mania most frequent in youth. The table of ages shows us, that the number of cases of mania are very considerable from twenty to twenty-five years of age, and still greater, from twenty-five to thirty. The proportion increases from fifteen to thirty, while it decreases from thirty to sixty years, and above. This is not true with respect to the general report of ages, published near the commence-

* *Pathologie und Therapie der Seelenstœrungen*, Leipsig, 1827, in 8vo.
† *Treatise on Insanity and other Disorders affecting the Mind*, London, 1835.

ment of this work. The absolute number of insane persons, augments much from the age of fifteen to thirty years, and decreases essentially, from this latter period to the close of life. At the age of forty, however, the number of the insane is a little the most numerous. By comparing the table of ages in dementia, the difference is still more remarkable. In fact, from the age of fifteen years to that of forty, the number of individuals in a state of dementia, is one half less than from forty to eighty years. Many, afflicted with dementia, have passed the age of fifty and sixty years, whilst few cases of mania are found. If an irruption of mania takes place, after the age of sixty years, it appears only in the persons of those who are strong, robust, and in the enjoyment of good health. If it has not then an acute course, and a speedy termination, it immediately degenerates into a state of dementia, or becomes complicated with paralysis.

TABLE OF AGES.

Ages.	*Report of the Salpêtrière for four years.*	*Report of my establishment during several years.*	
		MEN.	WOMEN.
15	17	10	7
20	56	14	10
25	51	15	21
30	55	7	6
35	56	9	3
40	31	7	1
45	27	6	2
50	16	3	3
55	13	3	0
60	5	0	2
65	0	10	0
	327	84	55

By comparing the number of maniacs of either sex, we shall learn that mania is more frequent among men than women. With men, it manifests a more violent and impetuous character. A sense of supernatural strength, which some maniacs experience, joined to the habit of exercising command, renders men particularly violent, audacious, passionate and furious. They are also more dangerous, as well as more difficult to control and restrain. Women in a state of mania are boisterous; talk and clamor much; are deceitful, and yield their confidence very reluctantly. A sanguine and nervous temperament; and a plethoric, strong and robust constitution; most frequently predispose to mania. Many whom I have seen suffering from this form of insanity, were persons of very great susceptibility, of a lively, irritable and choleric disposition, and endowed with an ardent and glowing imagination. They undertake with enthusiasm, the wildest projects, and engage in the most hazardous speculations. Some among them had been subject to hemorrhages and cephalalgia; to dreams, and somnambulism. Others had suffered from nervous affections, hysterical symptoms, convulsions, attacks of epilepsy, and cutaneous affections.

Professions, considered as the predisposing causes of mania, present nothing of special interest, when compared with professions considered as causes of insanity in general. However, I have deemed it proper to place before the eye of the reader such as I have met with, during four years, in the hospital Salpêtrière, and during several years in my own establishment.

TABLE OF PROFESSIONS.

Report of the Salpêtrière.		*Report of my Establishment.*	
Field laborers	30	Husbandmen	2
Domestics	26	Merchants	14
Seamstresses	83	Soldiers	16
Cooks	9	Students	15
Laundresses	11	Employers and servants	7
Tradesmen	15	Chemists and glass-makers	3
Peddlers	7	Physicians	1
Varnishers	5	Artists, literary men, and men devoted to study	5
Public women	44	Education improperly directed	10
Householders	45	Misconduct	3
		Householders	63
Total	275	*Total*	139

The causes of mania, which may be denominated, in some sort, individual, or rather specific causes, are physical or moral. The table of causes, which I shall subjoin, presents hereditary predisposition as a remote cause, doubtless, but as the most frequent. Among women of all classes, menstruation, either because it has been with difficulty established, or has been suppressed, or in consequence of its final cessation, is one of the most common causes of mania. It may with truth be said, that this cause extends its influence over the whole period of life during which females are in the most favorable condition for the development of mania. The cause most to be feared, after that of menstruation, is confinement and lactation; either because, after confinement the milk does not enter the breasts, or is suppressed during the period of nursing; or finally, because, at the time of weaning, the mother has neglected suitable precautions. Insolation, and exposure to the fire, often cause mania; a circumstance which presents a striking analogy to the influence of the warm season, relative to the frequency of this malady. In fact we stated above, that warm climates, and the heat of summer are favorable to the development of this form of madness.

Herpetic affections, either in consequence of their repercussion, or of their long continuance, sometimes produce mania. This cause acts most frequently between the age of thirty and forty years, and with women, during the anomalies of the last menstruation, or at some period subsequent to the cessation of the menses. Rarely do we fail of deriving good effects from counter-irritants which excite the skin, and determine there a point of irritation, or become the seat of a salutary evacuation. I have sometimes seen the application of a simple vesicatory to the arm, give rise to a herpetic form of erysipelas, which has put an end to inveterate cases of mania.

Epilepsy, which is so often the cause of idiocy and dementia, also produces mania; that is to say, after the attack of epilepsy, the patients thus afflicted remain in a state of mania, often attended with fury. Of the four hundred epileptics that we now have at the Salpêtrière, fifty at least, are maniacs after every attack. The fury of epileptics is blind, terrible, and dangerous in the extreme; and is most to be dreaded, in asylums for the insane. The mania of epileptics, is not of long duration. It sometimes terminates in a few hours; at others, in three, four, and eight days. It is very unusual for an attack to take place, before the epileptic seizure. Melancholy and hypochon-

dria have, in all times, been signalized, as predisposing causes of mania. Several distinguished masters, Alexander de Tralles, and Boerhaäve himself, were of the opinion, that melancholy (lypemania), was only the first degree of mania. This is in some cases true. There are in fact, some persons, who, before becoming maniacs, are sad, morose, uneasy, diffident and suspicious. Some suffer from a partial delirium, attended with excitement. Others, feel that they are sick, suffer from cephalalgia and soreness of the limbs, and have a presentiment, that they are threatened with a grave malady, and even entertain a fear of becoming insane. They are restless, and disturbed in mind; demand remedies, and take many of them. In these cases, melancholic and hypochondriacal symptoms are the precursors of mania. This is the period of incubation. These symptoms cannot deceive a man of experience. They are the index of an approaching attack of mania. The moral causes of mania are far more numerous than those of a physical nature. They are more considerable among women than men, and the disproportion is still greater, when we compare the causes of mania with those of dementia. One readily perceives the reason for these differences, when he refers to the temperament, age, and disposition of those who are usually affected with mania. Women, with whom love is the most important business of life, sustain, with far greater difficulty than men, the effects of disappointed affection.

It is a matter of no less interest, to compare the number of moral causes, in the inferior and higher classes of society. The brain of the rich man is more frequently called into action; the intellectual faculties are more developed; the social passions more frequently called into exercise, and more energetic. More dependent upon the caprices of fortune and of men, both the great and rich remain more exposed than the poor, to the fatal effects of wounded self-love, ambition, and the loss of fortune. The predisposing or proximate moral and physical causes, rarely act alone. They unite and become complicated, in order to produce mania. A fright occasions the suppression of the menses, which becomes the cause of mania; the latter ceasing, with the return of the menstrual evacuations. A woman during her confinement, experiences a severe mortification; the lochia are suppressed, and an irruption of mania takes place. We may with truth affirm, that mania rarely takes place, without the concurrence of both physical and moral causes. Sometimes this malady appears, from no other appreciable cause, than errors of regimen. It must, however, be understood, that these errors are, in some cases, the first indications of commencing disease. We have seen mania supervene upon grave forms of fever, intermittent fevers, and particularly the quartan type, according to Sydenham, who first made this observation. It has been known to appear after sudden relief from rheumatic attacks, gout and hemorrhoids; from erysipelas, an habitual evacuation, cutaneous affections, leucorrhœa, and blenorrhagia.

PHYSICAL CAUSES.

	Salpêtrière.	*My Establishment.*	
		MEN.	WOMEN.
Hereditary	88	38	37
Masturbation	8	6	2
Menstruation	27	0	11
In consequence of confinement	38	0	19
Critical period	12	0	8
Abuse of wine	14	4	0
Insolation	2	3	0
Exposure to fire	12	2	0
Falls or blows	8	1	2
Mercury	2	2	1
Cessation of psora	3	1	0
Cessation of herpes	2	2	6
A suppressed ulcer	1	0	0
Fever	3	4	1
Apoplexy	0	1	1
Epilepsy	0	0	0
Total	132	26	51

MORAL CAUSES.

	Salpêtrière.	*My Establishment.*	
		MEN.	WOMEN.
Domestic trials	62	9	20
Reverses of fortune	6	13	6
Want	19	0	0
Disappointed affection	53	4	14
Jealousy	4	1	8
Wounded self-love	1	15	7
Fright	36	1	6
Anger	2	1	1
Excessive study	0	10	0
Total	183	54	62

Mania rarely makes its incursion suddenly. Usually certain signs, more or less apparent, precede it, which often escape the attention of the relatives and friends of the sick. Still, of all the forms of mental alienation, mania is that, whose invasion is most frequently sudden and spontaneous. At one time, nothing occurs from which we can anticipate its approach; yet a strong moral impression, or an error of regimen suffices suddenly to develop it, and the maniac reaches the highest degree of intellectual and moral disorder. From its commencement, the delirium is general, and the fury extreme. Then it is, that maniacs destroy themselves, either in consequence of the wandering of the reason, not knowing what they do; or by accident, in consequence of imprudences; or through despair, having a consciousness of

their condition. Commonly, the invasion of mania is progressive and gradual. At first, trifling irregularities in the affections are noticed, in the conduct of one, whom the first symptoms of the malady begin to disturb. The maniac is, at the commencement of the malady, either sad or gay; active or indolent; indifferent or eager. He becomes impatient, irritable and choleric. He soon neglects his family, forsakes his business and household affairs, deserts his home and yields himself to acts, the more afflictive, as they contrast more strikingly with his ordinary mode of life. To alternations of delirium and reason; of composure and agitation; succeed acts the most strange and extravagant; entirely contrary to the well-being and interests of the patient. The alarm and disquietude; the warnings and advice of friendship, paternal tenderness and love; oppose, irritate and provoke the patient; exciting him by slow degrees, to the highest pitch of mania. There are persons who are hypochondriacal, and buried in a profound melancholy for some hours, days, and even months, before the explosion of mania; while others sink into a deep stupor, appearing to be deprived of every thought and idea. They move not, but remain where they are placed. They must be dressed, and food must be conveyed to their mouths. The features of the face are contracted; and the eyes red and gleaming. Suddenly, mania bursts forth, in all the strength of its delirium and agitation.

Many persons, subject to habitual indisposition, which has suddenly disappeared, experience a sense of perfect well-being, and believe that they have attained the enjoyment of sound health. They possess a sense of inexpressible power and happiness. To their eye, all nature is clothed with beauty. Everything appears not only possible, but easy. They know no obstacles to their desires. Contentment and joy are impressed upon their physiognomies. Insomnia, constipation and agitation, progressively increase; the ideas become confounded, and the patient gayly commences the most frightful of maladies. Most frequently, mania bursts forth without any febrile indication; but its invasion is sometimes characterized by the most alarming symptoms. At one time, it is a cerebral congestion, attended by epileptiform convulsions; at another, a gastric or typhoid fever; at another, a phlegmasia. Many maniacs, immediately before the attack, experience a sense of heat in the bowels, which is propagated from the abdomen to the epigastrium and head. Some suffer from a very painful cephalalgia, and have confessed to me, that they had sought to smite themselves upon the head, with the hope of relieving themselves from an insupportable evil. Finally, I have seen mania begin with convulsions.

Where is the man, who would dare flatter himself that he had observed, and could describe all the symptoms of mania, even in a single case? The maniac is a Proteus who, assuming all forms, escapes the observation of the most practised and watchful eye; differing widely from the melancholic, who appears ever the same; presenting few peculiarities, and those easily grasped. No one has better described than Pinel, the disordered activity, and the tumultuous and frantic movements of the maniac. This great observer possessed the art of describing with remarkable vividness, all the symptoms that he beheld. In mania, it is not easy, as it is in melancholy, to reduce the delirium to a primitive type, nor to define with precision, what faculty of the understanding is essentially disturbed. Every thing indicates, however, effort, violence, energy. Extreme agitation is most manifest, and a defect in the harmony of the mental powers, is most prominent in the delirium of maniacs. The attention is especially disturbed, and the patients lose the power, either of controlling, or fixing it. Let one, however, produce a strong impression upon the mind of a maniac, or an unexpected event arrest his attention; behold him suddenly becoming rational, and reason sustaining itself, so long as the actual impression maintains sufficient power to sustain his attention. Be-

ing no longer in relation with the activity of the other faculties, the attention is, in some sort, subdued by them, instead of directing them, and lending force to their action. We shall see, in examining the details, that all intellectual disturbances may be reduced to a want of harmony between the attention and actual sensations; the ideas and recollections. The maniac presents the image of chaos, whose elements, when set in motion, dash against, and oppose each other, to augment the confusion, disorder and error. He lives isolated from the physical and intellectual world, as if he were shut up in an obscure chamber. Sensations, ideas and images, present themselves to his mind, without order or connection; leaving no traces after them. Led away unceasingly, by impressions constantly renewed, he cannot fix his attention upon external objects, which produce an impression too vivid, and succeed each other too rapidly. He can no longer distinguish the qualities of bodies, by seizing upon their relations. He brings together places the most remote, and persons who are entire strangers. He associates ideas the most unlike; forms images the most whimsical; holds conversations the most strange; and gives himself up to the commission of acts the most ridiculous. The equilibrium between actual impressions and recollections, is broken, and the vivacity of the images which memory reproduces, is often such, that the maniac believes those objects to be present and real, which his excited imagination calls up to his view. A thousand hallucinations sport with his reason. He sees what does not exist. He converses with invisible interlocutors; questions and replies to them; commands them; promises obedience, and often becomes excited to anger against them. It is no unusual occurrence, to see the hallucinated aroused to the most violent fury, against beings, whom they believe they both hear and see. Those who are excited and agitated by maniacal delirium, are also irritated in mind, because they form incorrect opinions respecting the internal and external impressions which they actually experience. A young maniac is troubled with pains in his limbs, and becomes furious; assuring us, that he is pierced with a thousand nails. How many maniacs are furious, after having tasted of aliments that they find unpleasant, and believe to be poisoned! A lady persuades herself, that clouds suspended in the air, are balloons, and calls aloud to Garnerin, for permission to enter his car. Almost all those maniacs who are excited to fury, become so, in consequence of the false judgments which they form, respecting persons or things. One strikes an individual unknown to him, thinking that he is taking vengeance upon an enemy. Another discovers a rival in a person whom he never before saw. A young maniac became furious every time he saw a woman in company with a man; persuaded that his wife was with a lover. The monomaniac whose susceptibility is exalted or perverted, lives in error and acts at random. Error, having corrupted his desires and depraved his affections, he becomes suspicious and diffident. Hence spring all his disorders. He is uneasy, and seeks with anxiety for a good which he no longer finds. Placed in a false position, his relations with surrounding objects are of a painful character. He becomes vexed with whatever approaches him; is angry and furious. His fury expends itself with so much the more violence, as his desires are intense. Does he meet with an obstacle; he does not amuse himself in removing it, but breaks or leaps over it. Are his desires opposed; all the means proper to gratify them seem to him right. He is incapable of choosing, since he is unable to appreciate either dangers or advantages. Does he wish to come down from his apartment; he throws himself from the window, or sets fire to the house in which he is restrained. He slays his friend, as his only reply to the counsels of friendship. Is he opposed; he commits the greatest excesses, and is now only the subject of dread and danger to his fellow-beings and to society.

The maniac, constantly diverted, both by external objects and his own imagination; drawn away to matters having no connection with himself; forget-

ting every thing that surrounds him, and ignorant of his own existence, seems deprived of consciousness. Notwithstanding, there is no absolute cessation of the perception of external objects; the sense of personal identity is not lost, and perception still exists; for the maniac recalls, after his restoration to health, those objects of which he appeared to take no notice during his delirium. Having become composed and rational, he gives an account of what he has seen and heard, as well as of what he has felt, and the motives which gave rise to his determinations. His recollections of the past, do not usually become distinct for some time, even many months after his cure; and until a perfect measure of health has returned. The overthrow of the reason and affections, necessarily destroys the sentiment of justice and injustice. The maniac seems to have abjured all idea of religion, every sentiment of shame, and every principle of probity. This dutiful son, this faithful parent, or affectionate husband, forgets those most dear to his heart, and repulses them with harshness, and in a transport of passion. Their presence, advice, and the opposition which the condition of the patient renders necessary, agitate and irritate him, more than if they were strangers.

Language, bestowed upon man to express his thoughts and affections, discloses the disturbance which exists in the understanding of the maniac. As thoughts present themselves in a crowd to his mind, pressing upon, and crowding each other with confused violence; so, words and phrases escape his lips, with no coherency or order, and with an extreme volubility. Some maniacs, full of confidence in themselves, speak and write with facility, and render themselves remarkable, by the brilliancy of their expressions, the profundity of their thoughts, and the association of the most ingenious ideas. They pass, with the greatest rapidity, from the most obliging expressions, to threats and abuse. They utter words and incoherent phrases, which have no connection with their ideas or actions. They will sometimes also repeat for several hours, the same word, phrase, and even the same passage of music, without appearing to attach the least meaning to it. There are those, who invent a language exceedingly singular; while others, in speaking of themselves, address only a third person. Sometimes, the maniac assumes a tone of boasting and vanity, and remains by himself. Nothing possessing the power to control his attention, and yielding to the fleeting desire of the moment, he departs, directing his mind to a purpose, which he fails to accomplish. Diverted in his progress, though rapid and precipitate, he suddenly stops, pensive and thoughtful; and seems engrossed in some design. Suddenly he starts again, runs with rapidity; sings and cries aloud. Again he stops; and his countenance assumes an expression of admiration and joy. He weeps, laughs, dances, and speaks in a variable tone of voice. In connection with this uncontrollable activity, his movements are quick, abrupt and uncertain. The movements and gestures of maniacs, both of which appear most insignificant and ridiculous, are the expression of the exaltation, and disorder of the ideas and affections of this class of patients.

In general, maniacs become emaciated; the features of the face change; their countenance assumes a peculiar appearance; which contrasts with their physiognomy while in a state of health. The head is usually elevated, and the hair rough. The face is now flushed, particularly that portion which covers the prominences of the cheek bones. The eyes are red, sparkling, projecting and haggard; fixed upon the sky, and braving the beams of the sun. Now it is pale; the features are contracted, and often drawn towards the roots of the nose; the look is vague, uncertain and wandering. During a paroxysm of fury, all the features become animated; the neck swells; the face becomes flushed; the eyes sparkle; and all the movements are quick and threatening. To so many phenomena, which appertain to the convulsive energy of the organs of the life of relation, are associated symptoms, which

prove that the functions of nutritive life participate in this violent excitement. With the progress of the malady, the features become more changed. The face is sallow, brown or earthy, the physiognomy is convulsive, and the maniac is scarcely recognized. The development of the muscular powers, is in some cases extraordinary. We have seen them support the heaviest weights; break the strongest cords, and prostrate several men who sought to restrain them. That which renders furious maniacs so formidable is, that the idea of their augmented powers, is submitted to the deductions of reason; and that many entertain a conviction, that their powers are supernatural and uncontrollable. When they employ them also, they are the more dangerous; either because an idea of superiority controls them, or their understanding has become greatly impaired. Epileptics are, of all maniacs, those whose fury is most to be feared; because, while deprived of their understanding, nothing restrains them. There are those, on the contrary, who, laboring under other forms of mania, are timid, fearful and diffident, and submit, when a great array of force is brought against them, which they believe they cannot successfully oppose. This circumstance furnishes a first datum for the moral direction of these patients. Is a maniac furious, he will become still more so, if one or two persons only attempt to restrain him; but will compose himself, on the contrary, if several surround him, to oppose themselves to his excesses.

It is very frequently stated that maniacs, devoured by an internal heat, can support the severest cold. This observation, understood in a sense too general, has been exceedingly fatal to the insane. Undoubtedly, in numerous attacks of mania, a very intense, internal heat is developed. The patients experience a burning heat; at one time in the head, at another in the abdomen, and again in the skin, which is dry and arid. Some have remarked, that it seemed as if a burning fluid was circulating in their veins. Many also, consider it a punishment to be shut up in a close and heated apartment; or to be confined to their bed, enveloped in coverings. Is it astonishing that they prefer to lie upon the floor or even upon stone? We have seen those who, tormented by a devouring heat, cannot endure the slightest covering; and who, though naked, seek still for cold. We have seen them take the snow by handfuls, and allow it, with extreme delight, to melt upon their bodies; and break the ice of a pond or river, for the purpose of plunging into it. It is not unusual in hospitals, to see men, and even women, throw themselves naked into cold water, and expose the body, particularly the head, to the water, as it escapes from the fountains. Some demand of us to apply the douche of cold water, directly to the head.

A maniac becomes furious during the night, and utters frightful howls. At two o'clock in the morning, I order the douche, and whilst the cold water is falling upon his head, and inundating his body, he appears to be greatly pleased, and thanks us for the kindness we have shown him; becomes composed; and sleeps remarkably well the rest of the night. Notwithstanding, we must guard against the conclusion, that all maniacs are equally insensible to cold. In truth, they support a low temperature more readily than other men, because they are more active, and thus disengage a greater amount of caloric. It is certain however, that a very intense degree of cold agitates them; and that, during the winter, especially at the close of an attack, patients suffer and die, if care be not taken to protect them from the rigors of the season. Maniacs, say they, moreover, can support for a long time, both hunger and thirst. However, the greater part of them eat much, and with voracity; and are tormented and irritated by a burning thirst. The physical and moral irritation, which results from too long privation from aliments, torments them; and is succeeded by weakness, fainting, and even death. Many cases of mania terminate in dementia; which proves that maniacs become enfeebled, impair their strength, and need nourishment, in order to repair their exhausted pow-

ers. Pinel has established the fact, that the want of nourishment, and its improper distribution, exasperates and prolongs the evil. Some maniacs suffer from a degree of delirium so intense, that they appear to have a sense, neither of their existence nor wants; and refuse, at such times, their nourishment, not knowing what is presented to them. It also happens, that disturbance of the stomach, made manifest by the foul state of the tongue, and the fetid odor of the mouth, cause the maniac to repulse food when offered him; and sometimes, this condition of the stomach gives rise to vague ideas of poison; whence spring new motives to repugnance. In such circumstances, the refusal of food does not persist, and ceases, when the delirium abates, or when the gastric symptoms are dissipated. I have never known a fatal accident supervene in a case of mania, upon the obstinate refusal of nourishment; while monomaniacs and lypemaniacs resist hunger with a fearful, and even mortal obstinacy.

Maniacs are subject to insomnia, which persists for several days, weeks, and even months. Sleep is painful, and often troubled by dreams and night-mare. These patients usually suffer from constipation, which is generally of an obstinate character. Some have liquid and abundant stools; a symptom more fatal than constipation, especially when it occurs early in the attack, and often returns during the course of the malady. I remarked, when speaking of the causes of insanity, that onanism was often the occasion of mental alienation; but it produces less of mania than other forms of insanity. Maniacs, during the existence of their attacks, rarely yield themselves to this fatal habit. However, we meet with some cases of masturbation among them. If they are less subject to masturbation, they manifest no sense of shame in the mode of wearing their apparel; and do not refrain from conversation the most disgusting and obscene. Persons most respectable for their religious principles and morals, are not exempt from these failings. Onanism among maniacs is a fatal symptom. If it does not cease promptly, it furnishes an insurmountable obstacle to the cure. Hastening the giving out of the vital forces, it plunges these patients into a state of brutish stupidity, phthisis, marasmus and death.

Such are the general symptoms of mania. They present all the characteristics of excitement, and a want of harmony in the exercise of the faculties. There is a variety of mania, which does not present the same manifestations of force, energy, and disposition to fury; although we may always recognize in it the same incoherence of ideas; the same disorder both of words and actions; the same activity; the same mobility in the exercise, both of the intellectual and moral faculties; and the same want of harmony between them. Every thing excites those who are a prey to this variety of maniacal delirium; every thing opposes and irritates them. Their susceptibility is extreme; nothing checks their mobility; and their activity is uncontrollable. They are cunning, deceitful, imprudent, quarrelsome, and dissatisfied with every thing, even the most affectionate attentions. They are incessantly complaining, both of persons and things. Their loquacity is exhaustless. They are constantly speaking, and their voice is deafening. They are every moment changing their tone, thought and language. They apprehend every thing in its wrong sense. They are not ashamed to utter or to do the most shameful things. They abuse, calumniate, and please themselves, with perverting the best intentions, and in inventing evil. They also rend in pieces, and destroy. The more numerous their acts of malice, the more gay, contented and satisfied are they. They laugh at the mischief they do, as well as at that which they see done. Finally, they grieve, experience transports of anger, and cry aloud; are timid and cowardly; but are rarely excited to fury.

However numerous the anomalies which the symptoms of mania present; and however long its duration; the eye of an observer detects in this, as in all other diseases, a regular progress. Mania has its premonitory symptoms

and precursory signs. We distinguish in it, three periods. In the first, the patients complain of a general and unaccountable uneasiness; of cephalalgia; heat in the cranium, and a burning in the bowels; epigastric pains; a distaste for food, attended with thirst and constipation. They suffer from internal agitations, vague disquietude, insomnia, dreams, presentiments, alternations of gayety and sadness, and sometimes a temporary delirium. They still however retain their affection for their relatives and friends. The symptoms augment, the delirium becomes general and constant, and the moral affections are perverted. The transition to this second period is signalized by certain acts of violence or of fury, either spontaneous or provoked. After a period, usually of considerable duration, the maniac becomes more composed; less turbulent; and less disposed to fury. He is more attentive to foreign impressions, and more submissive to the counsels that are given him. At length, the moral affections awake, the features of the countenance are less convulsive, emaciation diminishes, sleep is prolonged, and the patient becomes aware of his condition. Ordinarily, in proportion as the functions of nutritive life, and those of the life of relation become established, a crisis, more or less complete, takes place. But if the functions of the life of nutrition are reëstablished without a corresponding diminution in the delirium, we may then fear, lest the mania pass into a chronic state, and degenerate at last into dementia. The following observation happily illustrates this regular course.

A., a field laborer, is tall, her hair of a flaxen color, her eyes blue and lively. Her physiognomy is changeful; her disposition petulant, irascible and choleric. At the age of six years, she has variola. Twenty years of age; menses very irregular; usually preceded, and often replaced by leucorrhœa. Twenty-eight years; married; domestic trials. Six months subsequently, a suppression of the menses takes place, which continues for eighteen months. Twenty-nine and a half years; mania, which ceased, only after the occurrence of a diarrhœa, which persisted for eighteen months. Thirty years; restoration to health; separation from her husband. Thirty-six years; *incubation.* Moral affections succeeded by general uneasiness, syncope, inappetence, pains in the limbs, weakness.

First period:—June 2d, 1813; Insomnia, nausea, white or yellow tongue, forebodings. June 17th. Emetic. The act of vomiting occasions great suffering. She believes that those around desire to poison her. She cries aloud, and is agitated. Her friends press eagerly around her, and assure her that she is insane;—a remark which affects her most keenly. She becomes delirious, and is removed from home.

Second period:—Her ideas are all exceedingly disordered, and every thing frightens the patient. Her arrival at Paris, and especially her stay at the Prefecture, render her perfectly insane; every thing appears of a dark hue, and she no longer recognizes any one. June 29th. At the period of her admission into the hospital Salpêtrière, Mad'e A. is extremely emaciated, her skin brown, her loquacity continual, and her delirium extends to every thing. She has numerous hallucinations, utters abusive and threatening language, and deals blows upon all around her. The patient breaks every thing within her reach, tears her clothing, goes naked, rolls upon the ground, sings, dances, vociferates, and rejects the aliments that are offered her. Insomnia and constipation are obstinate. The emaciation, the swarthy hue of the skin, the contraction of the muscles of the countenance, the knit brow, the commissures of the lips convulsively raised, the eyes sunken, often injected and haggard, and the animated, although doubtful look, give to the physiognomy of this maniac, a character which perfectly expresses the disorder and exaltation of her ideas and affections. July, same condition. Baths, tepid and prolonged. August. Cold douches, while the patient is in a tepid bath. Sometimes sleep follows the employment of the bath, but during the night she indulges

in cries and songs. Constipation continues. Sept. Tepid baths. Boils appear upon various regions of the body. There is a slight degree of composure, and on the 27th of September a cessation of the furuncles, and a return of agitation. October. We commence with two, and afterwards employ four, six, and eight grains of opium daily. We administer Hyoscyamus in the same dose, without obtaining any effect. November. The menses appear, but are scanty. Leeches are applied to the vulva, and there is a slight remission; but on the following day, delirium and agitation return, with the same intensity. Tepid baths daily. She passes the months of December, January and February, in the same state of delirium and excitement. We content ourselves with furnishing the patient with food, and protecting her from the cold. March, 1814. A serous diarrhœa, so abundant, that after fifteen days the patient is scarcely able to walk. The mental disturbance does not diminish, but fury no longer exists.

Third period:—April. The diarrhœa persists. Leucorrhœa also appears, and there are some slight manifestations of reason. The patient takes the ptisans and aliments that are offered her, and desires to recover once more the use of her faculties. May. We prescribe chocolate, and mucilaginous drinks. Her appetite is good, her rest better, and she recognizes those who approach her. She listens to the advice that is given her, but often manifests incoherence in her ideas. May 27th.—The diarrhœa has ceased for some days, and the patient is slightly irrational; but preserves a very great mobility, and a never-ceasing loquacity. She passes into the ranks of convalescents; but her look is one of astonishment, and her laugh convulsive. She is delirious only for very brief periods, and attends to what is said to her. June. Her mobility is extreme, and it is impossible to fix her mind upon work. Tepid baths, and antispasmodic drinks are employed, and there is a progressive and rapid return to her usual fulness of habit and reason. July 1st. She has a copious leucorrhœa, which continued for six days. Her habit continues moderately full, and her physiognomy composed. No undue vivacity of expression longer remains, and all the functions are reëstablished. Convalescence is perfect. July 11th. Discharged; since which period, she has never failed to enjoy excellent health. This observation, which is interesting on various accounts, presents to our notice, the three stages of mania, in a case whose progress has been perfectly regular. The operation of new causes, made the first pass into the second stage of the malady, and a long, and even harassing critical evacuation, preceded the third.

In the following case, we see a girl, twenty-one years of age, and habitually melancholic, whose mania is preceded by an attempt at suicide. The progress of this case is less regular, is modified by menstruation, and its duration much longer than the preceding. N., twenty-one years of age, a servant girl, the offspring of a father who committed suicide, and brought up by an epileptic aunt, is of a stature above the medium size, and her habit is moderately full; her hair flaxen, eyes blue, and disposition gloomy. She is silent, and very industrious and regular in her conduct. From infancy, her health was delicate, and she had variola at the age of six years. When fourteen, she was subject to pains in the head, cardialgia and leucorrhœa. At fifteen, menstruation was established, and since that period, has been both regular and abundant. Her health became firm, but if the menses were at any time scanty, cephalalgia supervened, attended with sadness and insomnia. At the age of twenty and a half years, N., becomes more sedentary and gloomy. When twenty-one, she devotes herself to the care of her aunt, who is sick; and is greatly grieved, as well as fatigued by her efforts. The menses are suppressed. She suffers from insomnia and an increased degree of sadness; often from panic terrors and thoughts of suicide.

In the month of Feb. 1813, she is thrice bled in the feet, without any

improvement of her health. She was afterwards brought to the residence of her mother, where her symptoms became exasperated. A few days subsequently, April 5th, whilst her menses are flowing, she throws herself into the river. When taken from the water, she does not speak, and maintains an obstinate silence during the succeeding days; her appetite is capricious, she moves not, nor sleeps. On the 1st, of June 1813, she is admitted at the Salpêtrière. She is in a state of stupor, attended with convulsive movements of the face, and the levator muscles of the shoulders. She refuses to speak, to take nourishment, or to walk. She remains in bed, or sits wherever she may be placed. The dejections are involuntary. Tepid baths are prescribed, and vesicatories applied to different regions of the skin. Leeches also are applied to the vulva. The menses do not again appear until the month of September. There is a slight show in October and November. December 15th, the menstrual flow is abundant. Sleep then returns; the patient converses more, and her appetite is improved. On the 23d, she converses and desires to render herself useful in the house. She sleeps, but her appetite is capricious. She also conducts with propriety, but it is necessary to provide for her wants. Feb. 12th, 1814, delirium, attended with certain febrile symptoms, such as the following; dry and parched lips; brown tongue; pulse full, hard and frequent. Thirst. During the month of March following, all the febrile symptoms disappear, but mania bursts forth, with all its agitation, violence and incoherence of thought. The face is deeply flushed, and expresses indignation; the delirium is general, her loquacity continual, sentences brief, and her movements prompt. The patient is greatly agitated, and will wear no clothing. She swears, threatens and strikes. Believing that she sees persons approaching her, she becomes irritated, because they do not address her. She tears, strikes, bites, cries aloud, dances and laughs, alternately.

During the months of September, October, and November, the same agitation and incoherence of thought continue. Her loquacity also, her disposition to fury, insomnia and constipation; as well as the suspension of the menses, continue the same. Notwithstanding the cold, she remains naked, refuses to wear any covering upon her feet, and walks thus, about the courts. She vociferates, holds obscene conversation, overturns and destroys. Tepid baths prolonged, and the douche which she dreads, in no respect modify her condition. During her convalescence however, she confessed that she dreaded the douche, which notwithstanding benefited her, although exceedingly painful. In January, 1815, there is a copious menstrual flow, and from that period she is more composed. The patient sleeps a little, and seeks to occupy herself, although always delirious. During the month of February, she is more tranquil and rational, both in her conversation and acts. In February, the menstruation is more abundant, the appetite more regular, sleep better, and there is no longer cephalalgia. The features of the countenance are not now convulsive, and the complexion is becoming more clear. She labors much in the house, and by slow degrees attains a moderately full habit. Tepid baths are continued, and an aromatic infusion is prescribed for a drink. During the month of March she becomes convalescent, reasons correctly, remembers her condition, and gives a complete account of it. It was her opinion, during her delirium, that the persons who surrounded her wished to slay her. She was discharged restored, June 19th, 1815. Since that period she has enjoyed excellent health, and resumed her ordinary occupations. Six years afterwards, June 5th, 1821, she died of phthisis.

The progress of mania is not always so regular, as in the first of the preceding cases. We have already seen, that this is a disease which varies in its mode of attack. It varies also, in the succession of its symptoms, in their duration and termination. In one case, from its commencement, the

mania manifests its highest degree of excitement, and thus persists to the end of the attack, which ceases suddenly. The patient then appears, as it were, to come out of a dream; and it seems to him that the medium which isolates him from the rest of the world, was rent, or had fallen from his eyes. In another, the progressive diminution of the number and intensity of the symptoms, enables us to foresee the most distant termination of the malady. Again, it is only after alternate remissions, more or less long and marked, that the maniac reaches convalescence. A point, to which I cannot too carefully direct your attention, is the remission, which is observed during the course of the first month after an attack of mania. It is constant. Does it mark the termination of the period of irritation? Mania is a disease emphatically chronic; nevertheless, its duration is sometimes very brief. We have known attacks to last only twenty-four hours; a few days or weeks. But in such cases, we may well fear a new attack, at no distant period. We cannot be too much on our guard, however slight and temporary may have been the first manifest action of cerebral disturbance, as the patients remain in constant danger of new cerebral symptoms. Mania persists for several months, a year, and for many years. Like all maladies, mania is remittent or intermittent. We have just described the progress of continued mania. Remittent mania differs from the continued form, in this respect only; that the disturbance of the thoughts and actions present remissions more or less marked and regular. There are some maniacs who sleep very quietly, and become agitated so soon as they awake. Others do not sleep; are agitated during the night, and composed after a night of insomnia. Finally, some are, both morning and evening, more composed, and accessible to foreign impressions. The remission is often so regular on alternate days, that we are tempted to believe that it is an intermission.

Intermittent mania, succeeding attacks, now regular, and now irregular, is very frequent. It may be said to embrace one third, among great assemblages of maniacs. Like intermittent forms of fever, intermittent mania assumes the quotidian, tertian or quartan type. Its attacks also recur every eight days, every month, every three months; twice a year, annually, every two, three and four years. Attacks burst forth spontaneously, and without other known causes than the epoch, season or year, on which previous attacks took place; or else they are provoked, now, by the same causes that produced the first attacks, and now, by different ones. Attacks are induced by moral affections, and by physical derangements; such as gastric embarrassments, constipation, cephalalgia, or accidental diseases. I have seen a soldier suffer from three attacks of mania, each of which immediately succeeded the venereal disease. A woman had two attacks, succeeding the same infection. With some women the attack bursts forth at each menstrual period; at every pregnancy and confinement. There are women, who become maniacs every time they nurse or wean their children. I have had in charge a young man who had suffered from three attacks of mania, at the opening of spring. Before the explosion of the delirium, his face was covered with a herpetic eruption, which ceased with the attack. Intoxication very frequently induces an attack. A lady is seized with mania every year; each attack being preceded by symptoms of metritis. We have, at the Salpêtrière, a girl whose attacks are announced by all the signs of phthisis pulmonalis. Epilepsy provokes the return of the attacks. Sometimes attacks of mania are very regular, both as it respects the epoch of their return, the nature of the symptoms, crises and duration. The precursory signs of attacks are sometimes constant. Some maniacs before an attack, are chatty or serious; others walk about much, feel remarkably well, and are very happy. Some sing or whistle; others are melancholic, sad, uneasy, pusillanimous; refuse to eat, and sleep little. Some have a presentiment of the returning attack, and experience all the premonitory

symptoms of it. In general, the attacks terminate suddenly, and sometimes without a crisis. Usually, during the remission, the return of the thoughts, affections and habits of health, is complete. However, symptoms sometimes remain, which prove that the attack is not entirely resolved.

I have seen persons who, during an attack of mania, reach a degree of emaciation bordering upon marasmus; and whose attacks cease, only when they have sunk into a state of extreme feebleness. The seizure having terminated, more or less time is required to restore to the patient his full measure of thought and usual fullness of habit; and scarcely has he attained to sound physical and moral health, when he relapses into a new attack. Intermissions are more frequent in mania, than in other forms of insanity. It is not rare to see mania alternate, with extreme regularity, with phthisis, hypochondria and lypemania. Mad'e de M., of a delicate constitution, nervous temperament, and great susceptibility, having experienced the unmitigated severities of the revolution, was obliged to emigrate with her family. Along with the privations necessarily connected with emigration, she experienced domestic trials, and became a maniac. She was then twenty-four years of age. An attack occurred every year. Having returned to France, the attacks were renewed for two years in succession. When committed to my care, she was, for the third time since her return, in a state of mania complicated with hysteria. I prescribed one drachm of camphor, dissolved in two ounces of pure vinegar, to be taken during the day, by table spoonfuls, in four ounces of water. On the following day, the attack was lessened, and ceased almost immediately; whilst the preceding attacks had lasted from ten to eleven months. During the succeeding year, the attack was renewed. She experienced at first, all the symptoms of metritis. She has epigastralgia, violent pains in the uterus, heat and paucity of urine; nausea, threatening syncope, especially when she places her feet upon the ground; burning heat of skin, pulse frequent, hard and small; thirst and disquietude. On the seventh day, the symptoms of metritis cease, and an instantaneous explosion of maniacal delirium ensues. She is exceedingly susceptible. Everything vexes and irritates her. She is greatly agitated, is continually speaking, and her thoughts are incoherent. Her remarks are vulgar, ribald and obscene; which last symptom is the more remarkable, as she had been educated with the utmost care. An aunt of the patient caused her to take the same medicine, which a year before had succeeded so well. At this time, however, to render its effect more durable, they administer the mixture of camphor and vinegar in one dose, and without diluting it with any vehicle. The result of it was an actual poisoning, which compromised the life of the patient. Consecutive gastralgia permits nothing to be introduced into the stomach; and for several weeks, she can take but a few spoonfuls of rice water, oatmeal gruel, or milk and water. The attack of mania, however, was cut short by it. She enjoyed a perfect intermission for two years; since which period, that is to say, for twenty years, the attacks recur almost annually; continuing however, only for one or two months.

Mad'e de S., of a strong constitution, has long resided in the Indies. Married at twenty, she was confined at twenty-one. Six days after her confinement her bed caught fire, she became alarmed, uttered a loud cry, and both the milk and lochia were suppressed. A quarter of an hour afterwards, she was seized with mania and fury, which lasted three months, and was succeeded by melancholy, which continued for two more. She was immediately bled several times in the foot, and cold baths were administered. She was then in the Isle of France. When twenty-nine years of age, she had a second attack, caused by the grief which the capture of Batavia, where her husband was garrisoned, occasioned her. A furious attack suddenly burst forth, persisted for two months, and was succeeded like the preceding attack, by melancholy. It lasted for four months. At thirty-five years of age, she had a

new attack, caused by the disquietude connected with a painful voyage, and despair at the imprisonment of her husband. The attack was less violent than the previous ones, and lasted but three months, comprising the period of melancholy. During the month of November, 1815, she has a fourth attack, produced by the removal of her husband from office, and the death of an intimate friend. The attack commenced on the third, and she was committed to my care on the fourth of November. The mania persisted for two months, and was succeeded by melancholy. The period of melancholy was prolonged to a greater extent, than in her previous attacks.

When forty years of age, she sails with her husband for Senegal, and experiences all the horrors of the shipwreck of the Medusa;—a shipwreck, unhappily so well known. Nor does it occasion the loss of her reason. On the following year, she experiences a fifth attack, similar in all respects to those which have preceded it. She reaches France in a state of sadness, and suffering from prostration and tremors at the stomach. These symptoms are dissipated, only at the expiration of some months. At the age of forty-five, she has a sixth attack. All the different attacks have presented the same characteristics;—a sudden invasion, provoked by some moral affection; a period of mania lasting from two to three months; succeeded by one of melancholy, which, at first, continued for two or three months only; and persisted for a much longer period, during the last two attacks. During the maniacal period, she conceives an aversion to her husband and daughter, who are the objects of her tenderest affection when in health. During that of melancholy, it seems to the patient that her head is empty, and she considers herself incapable either of thinking or acting. While the attack lasts, she becomes much emaciated; and so soon as the emaciation is extreme, the cessation of the attack takes place.

Sometimes at its commencement, mania presents all the symptoms of grave forms of fever. The diagnosis also, at this period of the malady, is not always easy. This error may be followed by the most fatal consequences, should an ataxic fever or cerebral phlegmasia, be mistaken for mania. Complications with cutaneous affections are frequent. It is rare among young women, that mania is not complicated with certain hysterical symptoms. The same is true of hypochondria among men. Mania is often complicated with epilepsy; more frequently still with paralysis and scurvy. It is also complicated with other forms of insanity; a circumstance that has given rise to many diverse opinions respecting the character and classification of different forms of mental alienation. Mania being produced by causes which are peculiar to it, and having symptoms which characterize it, a course also, more or less regular, like all other maladies, terminates by crises. Like them, it has its critical terminations, and its transformations into other diseases. If the crises of mania have not been well observed, it is not because they are wanting, but because the observation of them is difficult, in consequence of the fear and estrangement which maniacs inspire, and of the general abandonment of this class of patients, even to our own times. This disease terminates by evacuations of every kind, mucous or sanguine, vomiting, ptyalism, alvine dejections, leucorrhœa, blennorrhagia, epistaxis, menses, hemorrhoids, varices. It terminates by cutaneous phlegmasiæ and erysipelas. I have seen enormous furuncles, followed by abundant suppuration, put an end to mania. Finally, mania is terminated by continued and intermittent fevers. It is converted into a true melancholy, or degenerates and passes into dementia, which is, as I have elsewhere said, a termination of all forms of insanity. We must not confound this form of dementia with that condition of certain maniacs, which succeeds the agitation and delirium. The convalescents are prostrate, exhausted, and little disposed to exertion. They say little, but are no longer irrational, either in their conversation or actions. To those cases illustrating the critical ter-

minations of insanity, which I have previously reported, I will add the two following. They are cases of mania, terminated by critical deposits.

Mad'e A. F. G., nineteen years of age, of a nervous temperament, and medium stature; having flaxen hair, black eyes, and a light complexion, is the offspring of an insane mother. She had variola at the age of nine years, tinea capitis at twelve, psora at thirteen, and menstruated spontaneously at the age of fourteen. Since her menses have been abundant, she has been subject to frequent attacks of cephalalgia. When sixteen, she imagines that every one is watching her movements. Married at eighteen, at nineteen she is happily confined. She desires to nurse her child; but immediately begins to commit errors of regimen, and is unwilling to remain covered in bed, saying she is too warm, etc., etc. She experiences many pains during the act of nursing, and these provoke confusion of ideas. On the fourth day, she ceases to nurse her infant, and her breasts become excessively engorged with milk. On the fifth, she drinks, and washes herself in cold water, in consequence of which the lochia no longer flow. She complains of an insupportable heat; and they desire to bleed her, but to no purpose. On the fourteenth day, leeches are applied to the vulva, sinapisms to the thighs, and blisters to the limbs. On the sixteenth, leeches are employed behind the ears, new sinapisms and an ethereal potion, but all without success. On the 25th of Feb. the patient is brought to La Charité, remains there four days, and is transferred to the Salpêtrière. At the time of her admission, her delirium is general, and her breasts very hard. The patient refuses to remain covered, suffers from panic terrors, and regards those who approach her as acquaintances. March 5th, a deposit is formed in the right breast. An abundant discharge of sanious matter is established, and the delirium is lessened. Notwithstanding, the patient is unwilling to wear any apparel. April 10th; the wound of the breast tends to cicatrization. The delirium diminishes, and the patient becomes more accessible to the advice that is given her. Until the first of May, there is a progressive return of the vital forces and reason; and she sees her husband and relatives. May 12th, her convalescence is entire, and there is a complete cicatrization of the abscess. May 15th, reason is perfect. May 27th, she leaves the hospital, in the enjoyment of good health.

Elizabeth C., sixty-four years of age, of a good constitution, and very active for one of her age, has always enjoyed excellent health. She has never experienced any menstrual disorder, and has been four times happily confined. One of her sons was engaged in the Spanish war, and having no news from him, she is greatly afflicted. One day she believed that she recognized him in the midst of a company of soldiers, and follows them, from the faubourg Saint-Antoine, to the barrier Fontainebleu. It is not certainly ascertained what she does on the way, but she was taken on the following day, running naked through the street. When brought to the Salpêtrière, she is in a state of fury, which persists for six weeks; after which, the parotid of the left side becomes enlarged. The delirium immediately ceases, and the repeated application of leeches to the tumor, diminishes the inflammation. An abscess however forms, which opens, and is cured in the course of six weeks. Since the appearance of the tumor of the parotid, the delirium has gradually diminished, and completely disappeared, before the cicatrization of the opening in the wound.

It is consoling to think, that the malady, most deplorable as it respects the nature and violence of its symptoms, offers the readiest chance of cure. Mania is, in fact, of all forms of mental alienation, most certainly cured, if it is simple, and if the predispositions to it are not too numerous, and their influence too energetic. Of two hundred and sixty-nine maniacs who have been cured, and of whom I can give an exact and detailed account; one hundred and thirty-two were suffering from their first attack, seventy-seven from the

second, thirty-two from the third, and eighteen from the fourth; ten, had had a still greater number of attacks. They occur at briefer intervals, either because they are prolonged and multiplied; or because their intermission is shorter, less distinct and clear, and the mania continued. The duration of the malady is also shorter than that of other forms of insanity; a fact of which we can assure ourselves, by casting a glance over the following table; which proves that almost all maniacs are cured during the first year; and that after this period, the number restored to health is very limited.

Table of cures.—Cures obtained during the first month, 27; second month, 32; third month, 18; fourth month, 30; fifth month, 24; sixth month, 20; seventh month, 20; eighth month, 19; ninth month, 12; tenth month, 13; twelfth month, 23; during the second year, 18; in the following years, 13; total, 269. The seasons most favorable for effecting a cure, are, beyond contradiction autumn and summer; the most unfavorable, winter. Summer being the season for accidental mania, it is not surprising that maniacs are cured during the three months of summer.

Table of cures, relative to the seasons.—During the three months of Sept., Oct. and Nov., 83; Dec., Jan., Feb., 48; March, April, May, 61; June, July, Aug., 77; total, 269. If mania is cured more frequently than other forms of insanity, it is more rarely the cause of death; supposing all necessary precautions to be taken, to prevent the numerous accidents to which the delirium of maniacs exposes them. It is proper, in forming this favorable opinion, to take into the account the influence of the regimen and treatment to which maniacs are submitted, and to have reference to the complications and duration of the disease. For if mania has persisted for several years, the constitution of the maniac is, in some sort, identified with the malady, or the latter has degenerated. If it is complicated with epilepsy, paralysis, or some organic lesion, then certainly the mania is mortal; less, in itself considered, than by its complications. Among more than twelve hundred insane women, admitted into the Salpêtrière during four, and into my establishment for several years, scarcely thirty died from simple mania. Twenty-five died during the first attack, and four during the second. These maniacs died in the course of six years; two-thirds of them during the first year, as the following table proves:

Table of the periods of mortality.—Months. First, 3; second, 3; third, 0; fourth, 5; fifth, 0; sixth, 4; seventh, 2; eighth, 1; ninth, 2; tenth, 0; twelfth, 1. *Years.*—Second, 3; third, 2; fourth, 2; sixth, 3. Simple mania is rarely fatal. Maniacs do not die from the cerebral affection, but from typhoid, and cerebral ataxic fever, phthisis pulmonalis, and epileptiform convulsions. They die suddenly, as if the sensibility, being exhausted, nothing remained to sustain the vital principle. We had at the Salpêtrière, in 1814, a young woman twenty-four years of age, who was in a state of recent and furious mania, free from complications. Her life was taken by one of her companions. The pupils who assisted at the post-mortem examination were surprised, as well as myself, on finding no lesion of the brain or its meninges. At the necropsy of the maniac, of whom I spoke elsewhere, who also died suddenly, I found no cerebral lesion. It sometimes happens, that the brain and its meninges suffer from no lesion, although the maniac may have lived several years. The nature, extent and seat of lesions, are not in relation with the violence and duration of the delirium. When authors have met with lesions of the brain or its membranes, proof of the fact had been manifested during life, by embarrassment in the movements, paralysis, or convulsions. If we follow with attention the progress of the malady, we can, by the symptoms which complicate it, assign the epoch at which the lesion commences. On the other hand, how many organic lesions of the brain or its meninges have escaped the most attentive observation! When mania persists for a long

time, in the last days of maniacs, does not the general weakness dispose to local inflammations? Do not the symptoms of meningitis, of sanguine congestions, of cephalitis, and the encephalic lesions which we observe in examining the dead, belong to the epiphænomena which precede death? Has due care been exercised in distinguishing simple from complicated mania? It is certain that mania has existed, in which no cerebral lesion could be detected. Maniacs are sometimes very suddenly cured; while cases occur, in which they live 10, 20, 30 years, notwithstanding the lesion of an organ, whose influence is intimately connected with all those which are essential to life. Attacks of intermittent mania cease spontaneously.

What conclusion shall we draw from the preceding remarks? That pathological anatomy, notwithstanding the very important labors of MM. Foville, Calmeil, Bayle and Guislain, has not yet made us acquainted with the organic cause of mania. Thirty years ago, I would willingly have written on the pathological cause of insanity. I will not now attempt a labor so difficult; so much uncertainty is there, and so contradictory are the results of post-mortem examinations of the insane, that are made, even at the present day. I will add however, that modern researches permit us to hope for views more positive, clear and satisfactory.

Maniacs sometimes die from exhaustion of the sensibility. They reach this condition in consequence of their excessive agitation, and the exaltation of the delirium. They are much emaciated, and enfeebled even to syncope. They sink into a state of insensibility, and remain gathered up in their bed, without making the least motion; the pulse is depressed and feeble, the extremities are cold, and sometimes violaceous. In the course of a few days they die, especially if exposed to cold, or are not protected from its rigors; if care is not taken to warm them again, if cold, and to administer some invigorating potion, good wine, and succulent nourishment. It sometimes happens, and in cold seasons particularly, that maniacs are stricken with instantaneous and unexpected death. These are maniacs who are most agitated and violent; the wandering of whose reason, extends even to the loss of a sense of their own existence. They are usually emaciated, pale, of a nervous temperament, very irritable, and suffer from convulsive movements of the features. Do these individuals die of a nervous apoplexy? Post-mortem examinations have taught me nothing with respect to it; no lesion revealing the cause of death. Rarely are maniacs overwhelmed by cerebral hemorrhage, but they suffer from cerebral congestions, and partial softening of the brain, which provoke epileptiform convulsions, and destroy the patient in a few days. Slight symptoms of paralysis usually terminate thus, or indicate the near approach of mania to dementia.

Experience has proved that mania is not incurable, according to the prepossessions and expressed opinions of some men. This prejudice has been exceedingly fatal to maniacs, to whom have been refused, not only those means that were best calculated to restore them to reason, as well as that sympathy and interest which their malady required; but also many things necessary to their very existence. Maniacs were formerly almost every where, and are still in many countries, deprived of things indispensable to the preservation of life; constantly confined, tied, and even chained. The negligence and abandonment in which these wretched beings are allowed to drag out a miserable existence, clearly indicate the indifference of the dispensers of public charity, and every where claim the active solicitude of governments.

Treatment.—We must never lose sight of the fact that three periods signalize the march of mania, and that each one of these calls for a peculiar management. What resources does not hygiène present, by its physical as well as intellectual and moral agents, for the treatment of mania! Some physicians have confidence only in hygiène. However, pharmaceutic agents

have their utility, particularly at the commencement of the malady. But first, what application can we make of hygiène? At the commencement of the attack, and during the first period, the patient is placed upon the ground floor, in a retired apartment, which is ventilated, and a reduced temperature maintained; cooled when too warm, and heated when the season is cold. If the violence of the patient is extreme, we confine him to his bed, and control his movements with the camisole. He is restricted to a very low diet. Cold nitrous drinks are given him, pure water, the decoction of dog-grass, (*Triticum Repens*), or of barley, whey, almond emulsion, orange-sherbet, cherry and currant water, etc. The patient is left alone in his apartment, persons ready to serve him being near at hand. The presence of relatives and the visits of friends are interdicted, in order to reduce him to the smallest number possible, of impressions and sources of excitement. These measures are applicable only during the first period, after which the patient should be subjected to a different regimen. This class of patients ought not to be confined to their apartments; still less to their beds. Exercise is with them an instinctive want. If they are only boisterous, we should permit them in the open air to surrender themselves to all their susceptibility of motion, abandon themselves to all their vociferations and extravagances, in order to remove and exhaust their fury. We should have recourse to means of restraint, only when they run some risk of life, in consequence of their imprudence, or compromise that of others, by their freaks of excitement. Even then, restraint should be temporary. It ought to be prescribed by the physician, and carried into effect immediately after some out-break on the part of the patient, and should cease so soon as composure is established. Without this attention, and many others which experience alone can teach, maniacs will regard themselves as the victims of the injustice or caprice of those who serve them. As for those who, during the night, are unwilling to remain in bed, if they are not disposed to do mischief, it is better to permit them to go free, than to restrain them.

I have elsewhere unfolded the motives for this precept. Since the custom of keeping maniacs in close confinement has been laid aside, and instead of it, all that liberty which is compatible with their security allowed, the number of furious maniacs has greatly diminished. How many have become paralytic, in consequence of being confined for too long a period, to their bed or chair! Some maniacs will not, without resistance, bear clothing of any kind; but can be kept clad by the aid of the camisole, particularly in winter, and at the termination of their attacks. The aliments should be sufficiently abundant, and so distributed, that hunger and thirst shall not augment the causes of irritation and discontent. We should prefer as alimentary substances, articles easy of digestion; such as white meats, fresh vegetables and fruits. Some maniacs, at the commencement of their attacks, refuse every variety of aliment; but it is rare, that this repugnance does not cease after some days. It sometimes depends upon gastric embarrassments, which diet dissipates, or which it is proper to combat by appropriate means. Sometimes, also, it happens that this repugnance is caused by the excess of delirium, which deprives the patient of a sense of his wants. A blister applied to each leg, by distributing the sensibility more uniformly, or by provoking a *derivative* pain, has sufficed in such cases to overcome this refusal. Moreover, I do not approve, for maniacs, the coercive measures that are useful in some cases of lypemania.

It has been supposed that the moral treatment applicable to maniacs, consisted in reasoning and arguments. This is a chimera. Maniacs cannot sufficiently control their attention, to hear and follow the reasonings that are offered them. The moral treatment consists in seizing their attention, controlling their understanding, and in gaining their confidence. Though these patients may be audacious and rash, they are easily intimidated. Fear exercises over

them an empire so complete, that they become timid, tremble, and are submissive to those who know how to exercise a control over them. Fear, by its debilitating influence, moderates the excess of their irritability, and thus disposes them to hear and follow the advice that is tendered them. It is unnecessary however, that this sentiment be carried so far as to occasion terror. Without doubt, some maniacs have been cured by an extreme fright, but we do not say how many of them have been rendered incurable, in consequence of having been reduced, by injudicious treatment, to a continual state of alarm. We inspire fear in a thousand different ways; but the employment of these means must not be abandoned to rude and ignorant men. They would abuse it. It is not given to every one to manage skillfully this instrument of cure, and its application is not adapted to all maniacs. We succeed also, in arresting the attention of maniacs, by exciting their admiration and surprise. An imposing and unexpected phenomenon, which vividly strikes their senses, may bring them back to reason. Let a person present himself to a maniac with assurance, and a steady look, and we see this furious man, just now so lavish of threatenings, disconcerted, and becoming calm and tractable. The effect is the same if, by an imposing exterior, and by words, grave and energetically uttered, we inspire him with astonishment, confidence and respect. These effects last as long as the impressions received persist. The outward character, the physical as well as the intellectual and moral qualities of those who approach, or have the care of maniacs, exercise great power over them. As physical shocks, and energetic, perturbating medicines, cure maniacs; so moral shocks, vivid and unexpected impressions, also contribute to their cure. Oppose a great array of force to fury, and preparations suited to convince the maniac that all resistance is useless, and it will render him docile, if you are constrained at any time to employ it. Never allow him to be subjected to improper treatment. It will abase, degrade, or provoke him to anger; and the anger of the maniac is fury. Have special reference to the susceptibility of all insane persons; particularly that of maniacs who were accustomed to the polished manners of large cities, and to the higher classes of society. Arbitrary punishments, prolonged seclusion, irons, blows, rude remarks and menaces, irritate, rather than compose them. If repression is necessary, exercise it without passion and brutality; otherwise, the maniac will see only anger in your conduct. Facts will prove, better than mere reasoning, the happy results of a moderate and intelligent degree of repression, on maniacs.

Pinel relates certain cases, which establish the results that may be derived from this influence. General V., forty-five years of age, of a lymphatic-sanguine temperament, of a very full habit, an understanding well developed, and a very vivid imagination, had obtained the entire confidence of Bonaparte. He was charged with the direction and care of the immense collection of artillery in the camp of Boulogne. He became greatly fatigued, not only in the exercise of his duties, but also in making experiments in gunnery, in the open air, and exposed to the heat of a summer's sun. Suddenly the General quits the army, enters a carriage with an aid-de-camp, causes it to be covered with branches of trees, and announces along the whole route that he is going to Paris, to carry a treaty of peace which he has just signed with England. On completing half the distance, he obliges his aid-de-camp to leave him, and permits no one to enter the carriage. He pays the postillions largely, and is angry because they do not proceed with sufficient rapidity. He gives himself no time to eat, arrives at the Place du Carrousel, meets General —— in his carriage, stops him, and begs permission to take the carriage of the latter, in order to reach St. Cloud as soon as possible, (the news of the treaty of peace having already spread throughout Paris, and the public funds risen.) The sick man prevails with his companion in arms, who gives up to him his carriage. General V., with his dress in great disorder, penetrates even to the apartments

of the Emperor, and announces to him that a treaty of peace has just been formed, and that he had hastened to communicate to him the news. The patient is brought back to Paris, and treated by Corvisart and Pinel. At this epoch, the malady presented all the symptoms of a gastric affection, and a mania with fury. Attended by his relatives, and surrounded by domestics, the General manifests a wish to escape through the windows. They confine him to his bed, and he becomes still more exasperated. They tighten his bonds, and he becomes composed. On gaining a greater degree of liberty, he disencumbers himself, and falls upon those who serve him. One of them is wounded, and they bind him anew. Averse to restraint, he looses his bonds and severely wounds another domestic. Fifteen days pass in a state of maniacal delirium, alternating between fury and affected composure. The patient is committed to my care under the direction of Pinel. He was much emaciated, his tongue thick and white, agitation extreme, and delirium continual. His ideas were incoherent, and at times, he indulged in cries, menaces and abuse. He also suffered from thirst, constipation and insomnia. On the following day a bath is ordered, and the patient assures me that he will not take it. I send to him twelve attendants, with a supervisor at their head. The latter informs the General that the bath awaits him. The patient becomes angry, threatens him, and declares that he will not bathe. On his refusal, the supervisor informed him that he had received orders to take him to the bath, if he did not go readily. The General raises himself proudly: *Wretches*, says he, *will you dare lay a hand on me?* Yes, General, this is our order; and at the same time the attendants approach. The General looks at them with pride, and starts, saying: Do not approach me. Whilst he is in the bath, I visit the patient, who is, at first, very much irritated, but gradually becomes tranquil. I endeavor to persuade him that nothing will be required of him, but by my order, and for the benefit of his health. From that time he becomes perfectly tractable.

Notwithstanding, the delirium persists during the whole summer, with certain intervals of remission, during which the patient writes comedies and ballads, which display the incoherence of his thoughts. During the paroxysm, he is very irritable, and spontaneously excited. He leaves his apartment, uttering furious cries; makes several turns in the garden, becomes composed, and returns tranquil, after the lapse of a few minutes. This exasperation is renewed twenty or thirty times a day. Notwithstanding the wandering of his thoughts, the General conceives the design of perfecting a certain weapon, and makes a drawing of it. He manifests a desire to execute a model of it. After having long avoided making any reply, I yield to his demand; he giving me his word of honor that he will go merely to the founder, and return peacefully. One attendant accompanies him, and two others follow at a distance. The General makes his toilet, which has been very much neglected since his illness. He goes to the founder, presents his drawing, engages him to cast his model, and says, when leaving him, that he will return in eight days. He passes an hour with the founder, without the latter suspecting that he is doing business with a maniac. The General has scarcely reached home, when agitation, delirium, and a disposition to fury return. Eight days subsequently, I permit him to make a second visit to the founder. The model is executed, and an order to found fifty thousand of them is given. This order was the only act of delirium which revealed to the founder the malady of the General. At a later period, this weapon was adopted in the service.

During the autumn, the delirium progressively diminished, and the General recovered entirely the use of his reason. On returning home, he experienced very serious trials. He had been placed at the retreat in the month of September, two months after his attack. His reason was not disturbed, and he for a long period solicited a commission, by means of which he could again

engage in the active duties of life. He was unsuccessful, however, although the relative of a distinguished personage at that epoch. Chagrin takes possession of his mind, and during the autumn following, on a day when he had been relating to me his trials, and after having been conversing on matters of business with M. Laffitte, to whose residence he had sent his carriage, instead of returning home, the General wanders about for thirty-six hours. Exhausted doubtless by fatigue and hunger, he enquires the name of the place in which he finds himself. He is informed that it is Etampes. In a moment, he recovers his understanding, and is painfully affected, on reflecting on the disquietude of his family in consequence of his long absence; orders himself to be brought back to Paris, and sends, desiring me to see him. The General had no recollection of what he had done during these thirty-six hours. He expressed his condition by saying; I have had an apoplexy, which has spared the organs of motion. He complained of great fatigue; and his limbs were very much engorged and lacerated. From this moment he manifested signs of paralysis of the tongue, and his memory became enfeebled. A month subsequently, a delirium supervened, of which the patient had a presentiment, and employed all those means that were proposed for his cure. Upwards of twelve moxas were successively applied to the base of the cranium and nape of the neck. Nothing could arrest the constant progress of the paralysis, nor the weakening of the understanding. At length, after an interval of ten months, a serous diarrhœa occurred, an enormous eschar formed on the coccyx, and epileptiform convulsions were repeated for two days. The patient died.

On opening the body, which was done twenty-four hours after death, the cranium was found thin and injected; the meninges thick and containing serum. The ventricles also, and cerebral substance were injected. At the inferior and posterior part of the right hemisphere, adhering to the dura-mater, I discovered a tumor, about the size of a cherry and encysted. It was filled with limpid serum, and compressed the convolutions of the brain, for its lodgment. The white substance surrounding the tumor was dense. The bronchial passages were engorged with mucus, and the aortic valves ossified. There was serum in the peritoneal cavity, and the mucous membrane of the large intestines was slightly reddened. Worms were found in large numbers, in the cœcum and rectum.

M., twenty-seven years of age, and of a lymphatic-nervous temperament, after an attack of fury, which had lasted six months, remained in a state of melancholy. In the following spring, the period at which the attack of fury had burst forth in the preceding year, this young man presents all the indications of a new attack: redness of the face, changefulness of the eyes, diminution of the appetite, a fetid breath, constipation, hasty movements, and brief replies. At length, after eight days, the attack manifests itself by cries, provocations, threats and abuse. He breaks and destroys every thing for the sake of freedom. He repulses me, and treats my advice with disdain. During the night, he yields himself to all the excesses of fury. At break of day, I order him to be permitted the liberty of the garden. He runs about, singing, crying and swearing. Seeing himself free, he attempts to root up a tree, wherewith to exterminate his enemies. His attendant tells him that he should destroy nothing. This advice is unkindly received, and, the attendant insisting, the furious patient springs to strike him. This movement had been anticipated. Other attendants, who had been stationed at a little distance, lay hold of him and convey him to a chamber deprived of light. I immediately present myself before the patient, reprove him for his transport of passion, point out to him the wrong that he has done in striking, and leave him to his reflections. Two hours afterwards, not a trace of fury remains, and M. begins to appear rational.

A lady forty-eight years of age, of a lymphatic temperament, and a peculiar

disposition, becomes a maniac in consequence of the misfortunes of the revolution. In consequence of the disorder of her ideas, she indulges an intolerable pride, and is always ready to strike. It was enough to place upon her twice, for an hour only, the camisole, and to cause her to experience the mortifying effect of this treatment. From this time, she becomes perfectly docile, and far from retaining any resentment against me, she boasts of my firmness, and treats me with friendship, though she has not recovered the entire use of her reason.

A furious man injures and destroys whatever comes within his reach. He beats his attendant, enters his apartment, barricades it, and then tries to demolish it. I order several attendants to approach his apartment, who are told to make a loud noise, and say to the patient, that he will repent if he does not open the door, and they are obliged to force it. He laughs at these threats. The door is broken open, and the attendants enter precipitately in a crowd. He becomes disconcerted, and is filled with fear; throws himself upon his knees, asks pardon, promises to be tranquil, and keeps his word.

A justice of the peace, in 1804, having become a maniac, gave his decisions on certain occasions in a very loud and threatening tone, and pleased himself, by pronouncing the doom of several of his compatriots. This furious explosion was repeated several times in the course of the day. A monomaniac, after having concerted his measures with me, on a certain day says; "Sir, retire, for I also am ill, and feel that I am going to become furious, when I am terrible, and capable of slaying every body." This decisive and repeated threat put an end to the oratorical transports of the maniac.

A young man, twenty years of age, surgeon of a battalion cantoned at Ostend, of a sanguine temperament, of a haughty disposition, quick and passionate, and very devoted to study, experiences certain difficulties. He loses his reason, and regards himself as destined for great exploits. His delirium is general, but vain thoughts predominate, and he exacts various attentions. He treats his comrades with contempt, yields himself up to acts of fury, because the figure of persons whom he meets is disagreeable to him, and because he gives a wrong interpretation to what is said to him. He proceeds so far as to provoke his Colonel to a duel. His father, who had hastened from the country, is not recognized, is regarded with hatred, and threatened with a thrust of his sword. This young man is committed to my care. His hair is black and crisped, his eyes bright, his look proud and threatening. The prominences of the cheeks are flushed; the face pale, with a slightly sallow hue. His delirium is general, and his loquacity continual. His conversation is imperious, and his movements brusk, and hesitating. He repulses food with disdain. After an hour's isolation, and great agitation, I approach the patient alone, seize him firmly by the arm, and oblige him to remain near me. After regarding him intently: "Young man, said I, you are to remain here some days; if you desire to be comfortable, be obliging and kind. If you choose to act like one deprived of the use of his reason, we shall treat you as we do the insane. You see these attendants; they are ordered to procure for you whatever you may ask for with composure and politeness. Otherwise, they are to obey no one but myself." At the close of my remarks, which were listened to with impatient composure, I let go the arm of the patient, who continues to walk about at a rapid pace, but without noise. Whenever M. R. becomes agitated and cries, I have only to appear, or make myself heard by him, and composure is restored. Tepid baths, cold lotions, acidulated and laxative drinks, administered from time to time, together with abundant exercise, progressively effect a cure in the course of three months. This young man has assured me, that notwithstanding his delirium, the words that were addressed to him on his admission, were always present to his mind.

Mad'e ——, at the age of fifty-four years, suffered from a first attack of

mania, after the cessation of the menstrual flow. Six years subsequently, she feels the approaches of a second seizure, arranges her household affairs, and desires to be conducted to a private hospital so soon as the attack shall burst forth. It declares itself by a sudden and general delirium, attended by great agitation and fury. Desiring to escape from her house, she throws down and beats all who oppose her. After the lapse of some days, the patient is committed to my care. She spends the whole of the first day in relating the history of her malady, and commiserating us for having to do with a woman so wicked, and capable of every species of depravity. Early in the evening, she experiences a feeling of universal chilliness, which is succeeded by cephalalgia. The face is flushed, and the thirst ardent. Some hours subsequently, her loquacity becomes incessant, her conversation obscene, and she indulges in the use of insulting language, menaces and cries. They tell me to set fire to the house, to kill every body, to throw myself down, etc., etc. I arrive speedily, censure her conduct with much severity, and complain loudly of so much noise and disturbance. "What they say to you is not true. Do not try to hear. There is no one near. You have nothing to fear. I am here to rebuke the foul spirit that inspires you. Fear nothing and retire." These words spoken with energy, and in a grave tone, satisfy the patient. She returns to her bed, and is tranquil the remainder of the night. On her recovery, she told me that my words had reassured her, against the suggestions of a malevolent spirit, who was accustomed to take possession of her during the existence of her malady.

The cases which I have just reported, demonstrate, some of them, the good effects of moral influence on maniacs, especially during the early period of isolation. Others, the desirable direction that it is capable of giving, to the minds of those patients when the delirium and disposition to fury persists. These facts may serve as a guide, in circumstances analogous to those in which I found myself. It must not be forgotten, that to succeed, the impression must be vivid and energetic. I have seen maniacs cured instantaneously, by the impression they experience on entering a hospital or establishment for the insane.

M., who was of a quick, passionate disposition, and very vain, survives a cerebral fever, and remains a maniac. His delirium is so violent, that he rushes furiously upon his wife and children; and is, at length, committed to my care. Placed upon the basement floor, in a gloomy apartment, with no other furniture than a bed, this patient, who, for a month previously, had been in a state of general delirium, furious and sleepless, from the first night of his isolation, is composed and sleeps. On the following day, the fury does not return, and there remains only a kind of revery, which he dissembles, through fear of being regarded insane. At intervals, there is some degree of agitation, which the patient restrains. From the third day, he is restored to health, and occupies himself much with the quality of the aliments with which they will serve him. On the fourth day, he calls for his wife and children. On the ninth, he receives a visit from his wife, leaves with her for the country, remains there forty-eight hours, and resumes his usual occupation. He however retains a grudge against his physician,—an old friend,—because he believed him insane, and tore him from his family. By time, this prejudice is dissipated, and M. has told me since his convalescence, that on the first night, he had felt the delirium vanish like a dream.

The physician who treats a maniac, should never seek to inspire him with fear, but should have, subject to his order, a person, who shall charge himself with the painful task, who may act as circumstances require; and oppose himself, when necessary, to the wildness, impetuosity and violence of the patient. The physician should be, among the patients, a messenger of consolation.

He must manage with address on those occasions in which he acts the part of a protector and benefactor. He should maintain a tone, obliging, yet grave; and ally goodness with decision, so as to command esteem. He will thus gain their confidence, without which no cure can be effected. His countenance, look and words; his tone of voice, his gestures and silence even, produce an effect upon the mind or heart of the maniac. The physician must decide upon the visits of relatives; indicate rewards; and prescribe punishments. It is for him to direct all who approach the patient, and those who serve him. On the subject of interviews, it is necessary, in general, to be extremely cautious; since the visit of a relative or friend, often awakens thoughts, with which recollections are connected, which continue, or revive the delirium. We are of the opinion, that the management of maniacs during convalescence should be various. The greater part of them however, need consolations, encouragement, agreeable conversation, gentle emotions, walks and varied exercises. Before submitting them to their former habits, and the influence of their friends, a time of trial, of greater or less duration is necessary; during which, the patient should not remain in that habitation in which he sees objects of a painful character, and where he has yielded himself to his most violent transports. The convalescence of maniacs is often long and difficult. Sometimes however, it is prompt; in which case, you may well fear an intermittent mania. In some instances, convalescents, on being restored to society, to their families and former habits; acquire a full measure of health, only at the expiration of several months, and sometimes even longer. An extreme sensibility still continues, which renders them very impressible, very susceptible, and accessible to depressing emotions. Some are mortified in view of the condition from which they have just obtained relief, and dread their first interview with their relatives and friends; especially when, in their delirium, they have committed strange and blameworthy acts, the recollection of which wounds their self-love, or afflicts their hearts. Some consent to speak of their malady, and to see again the persons who have had them in charge. Many retain an aversion towards those who have been engaged about them, and have had the care of them. If this aversion, or those prejudices, are inordinately strong, they engender a true melancholy; a disposition to suicide, or a new attack of mania. I recommend journeyings and a residence in the country, to these convalescents, before returning to their families, or placing themselves in those circumstances to which they have been accustomed, or in presence of those persons who were witnesses of the invasion of their malady.

The administration of medicines, properly so regarded, calls for the most careful reflection. When one would combat mania, he must guard against the spirit of system, and suspect exclusive modes of medication: so easy is it for us to permit ourselves to be imposed upon, by the violence of symptoms. The same medicines should not be ordered indiscriminately to all maniacs, and during all periods of the malady. Independently of the general considerations relating to season, age, sex and temperament, it is necessary to modify our therapeutic views, in accordance with the condition of each individual. We must, in the first place, assure ourselves as to whether the mania depends upon some pathological cause, and treat it in accordance with this view. Many maniacs have been rendered incurable, because notice was taken, only of the effervescence of the delirium, and the violence of the fury; and because all maniacs were treated in the same manner. When, from the indications which have been collected respecting the causes of the malady, and from observation, we are unable to reach the source of the evil, it is preferable to limit ourselves to a judicious expectation. At the outset of mania, during its first period, if gastric symptoms are present, we endeavor by mild measures to relieve the first passages. For this purpose, we may employ one or two

emetics; the tartrate of antimony and potassa, diffused in a large amount of orange water, whey, etc. If indications of plethora are present, we employ and repeat blood-letting. We apply leeches behind the ears, or upon the temples; cupping glasses to the back of the neck; and frequently a small number of leeches to the anus. The redness of the face and eyes, the ringing and buzzing sound in the ears, together with a pulsative pain in the temples, or within the cavity of the cranium, reveal a tendency to cerebral congestion. We must be cautious respecting sanguine evacuations. By enfeebling maniacs we run the risk of throwing them into dementia. "Bleeding, says Pinel, is an unusual evacuation, and one which constitutes an epoch in the hospital for the insane (Salpêtrière). How numerous are the maniacs who have never lost blood, and been cured; how many have been bled, and still remain incurable!"

We employ tepid baths, and continue them for two, three and four hours; repeating them two and three times a day, by giving a bath every time that the delirium and fury is renewed, if the subject is of a dry and irritable temperament. While the patient is in the bath, we apply cold water constantly to the head; now by pouring the water; now by keeping upon the head a cloth or spunge saturated with it. We insist upon the use of cold, diluent and slightly laxative drinks. Lastly, we unload the large intestine by enemata, at first emollient, then purgative. The diet should be cautiously restricted. When the violence of the symptoms has abated, we allow the patient to expend his fury in the open air, and employ his activity, by extending to him greater liberty. We allow a more abundant diet. If there are intervals of reason, we redouble our proofs of interest and good will. If crises appear, we notice, and second them by a more nutritious regimen, and some light tonics. The following case illustrates the danger that flows from interfering with the efforts of nature.

A woman, about thirty-six years of age, was admitted at the Salpêtrière January 18th, 1818. She was both maniacal and furious, as well as much emaciated, and very irritable. The delirium persisted with the same violence, until the beginning of August, and psora then appeared, and made rapid progress. The delirium diminished, and at the close of the same month, had almost entirely ceased. Wishing to relieve her from this troublesome affection, which was a source of much discomfort to her, I ordered sulphur baths, and a bitter ptisan. After the fourth bath, the psoric affection began to diminish, and the delirium and agitation reappeared. The baths were suspended; but a few days subsequently, (September 13th,) the patient, who was very feeble, died. The opening of the body presented no notable lesion within the cranium, though the lungs were diseased. It is probable that if I had been content to sustain the vital forces in this case, the psora would not have disappeared, the crisis would have been completed, convalescence would have had a regular progress, and the patient have been cured. My readers will pardon this confession. I desired to point out, by a striking example, the importance of respecting critical efforts.

Finally, when composure is reëstablished, and maniacs begin to realize their condition, although delirium still continues, and the affections may not be fully aroused; their situation must be changed; they must be withdrawn from those places in which they have yielded themselves to their extravagances, and surrounded by objects, both new, and suited to divert them. We induce them to labor and exercise; and prescribe for them a strengthening regimen. The same course should be pursued in each attack of intermittent mania. During the intermission, we administer remedies suited to combat the periodicity. Quinine, which is so useful in intermittent fevers, when judiciously administered, sometimes succeeds in intermittent mania. This

agent however, often fails; perhaps, because it is not given in doses sufficiently large, because it is ordered when the malady is inveterate, and when all other medicines have proved ineffectual. I have seen it succeed, in some recent cases of intermittent mania, whose attacks were renewed every three weeks, or monthly. But the treatment of mania would cease to be rational, if every period of the disease, and all maniacs were treated in a similar manner. When mania has passed into a chronic state, therapeutic measures vary, according to circumstances. If mania has burst forth, after the suppression of the menses, hemorrhoids, or a habitual hemorrhage, we practice general blood-letting, local bleedings renewed from time to time, and in small quantity, and other means adapted to reëstablish these evacuations. If mania results from confinement, or after a sudden suppression of the milk; laxatives, purgative enemata, blisters and setons are usually sufficient to terminate it.

M. R. J. B., twenty-eight years of age, is the offspring of a mother who experienced a slight attack of apoplexy, at the age of forty-eight years. One of her sisters became insane at a later period. She had variola when nine years of age. Between the age of seventeen and eighteen years, she suffered from violent cephalalgia. When eighteen years old, the menses were established, and the cephalalgia disappeared. On the 14th of March, 1819, she was happily confined. She experiences many trials, and on the sixth day delirium bursts forth. On the 23d, she is brought to the Salpêtrière; and at the time of her admission, thinks that she hears many voices, which induce her to injure those around her. She considers herself bewitched; experiences violent pains in the limbs; and refuses all kinds of internal medicine. I then order a large blister to the back, and at the same time administer tepid baths, affusions of cold water to the head, and diluent drinks, succeeded by purgatives. The delirium diminishes, and the menses re-appear. The patient finds herself so much benefited by the blister, that she calls for its renewal. Her reason being shortly altogether reëstablished, she leaves the hospital. She afterwards married, and fifteen years subsequently, falls into a state of hypochondriacal lypemania, and comes to consult me; enquiring if she can employ a blister, in which she has the utmost confidence, from her recollection of the good effect of that which I had formerly ordered. In the same circumstances, I have derived much benefit from the use of the whey of Weiss, continued for several successive days, in connection with a diluent drink. This whey usually purges in a dose of twelve ounces, without producing colic pains. I have prescribed, in that form of mania which bursts forth after confinement, three laxative enemata daily, for one or two weeks, and the patient is put upon a strict diet. I could relate several examples of the good effects of this last remedy. The enemata are composed of milk and four ounces of sugar.

If mania is produced by the retrocession of gout, by the disappearance of a herpetic affection, by the sudden cessation of psora, or by the suppression of an ulcer, we employ such means as are calculated to recall these disorders respectively; and sometimes by an exutory, furnish a substitute to those affections which have disappeared. It was thus, that during the last year, we cured, as if by enchantment, by establishing a seton in the neck, a young person who had become a maniac immediately after the cicatrization of an ulcer, seated upon the prominence of the cheek bone of the right side, from which she had long suffered. If mania is the effect of the presence of worms in the alimentary canal, we shall find benefit from the use of calomel combined with jalap, aloetics, gamboge, etc. If mania supervenes upon a grave disease, an intermittent fever, onanism, or a feebleness, depending upon a too rapid growth; we combine a corroborating regimen, ass' milk, bark, bitters, and tepid baths, which compose the nervous irritation of feeble persons. We then pass to river and sea bathing. Affusions of cold water have first composed, and at

length cured, furious maniacs of a nervous temperament, whose idiopathic mania depended upon disorder of the nervous sensibility. The following facts will prove that the action of this agent is not always physical.

Mary Margaret L., twenty-five years of age, of a sanguine temperament, tall, of the ordinary fullness of habit, of an extremely changeful physiognomy, and remarkable susceptibility, at the age of seven years suffered from a severe illness, and had variola when eight years old. At fifteen, the menses were established spontaneously, and were afterwards regular. She is subject to cephalalgia, and frequent attacks of epistaxis. When twenty-four years of age, her lover was enlisted into the army, and she became sad and gloomy. Her younger sister married; which afflicted her the more, as the female companions of the former were very agreeable to herself. A new lover presented himself, to whom she became attached. He however soon after married another woman. This occurrence was to her the cause of new trials. They fastened horrible things upon her door. On the 25th of July, 1811, when twenty-five years of age, being at a ball, L. is placed opposite her perjured lover. She suddenly faints, and falls backward. The syncope passed, she is seized with delirium. For three days she performs a thousand extravagances, leaping and dancing, but not uttering a word. On the 28th, she is composed, and her reason restored. Eight days subsequently, one of her companions indulged in abusive language towards her. The delirium reappeared, in connection with attempts at suicide. The menses being suppressed, she is bled, and leeches are applied to the vulva, but with no marked effect. A month afterwards she was admitted at the Salpêtrière. At the time of her admission, L. was in a state of hysterical mania. For three months her menses did not appear; and when they were reëstablished, there was no amelioration of the delirium. In the month of December, she suffered from convulsions and hysterical suffocations, which were composed by tepid baths. In the month of January, 1812, there was uterine fury. We administered antispasmodics, assafœtida, etc. In June and July, the delirium was the same, but her composure greater; the menses also flow. In the month of August, reason and delirium alternate. Autumn passes in the same state, notwithstanding the use of prolonged and frequent baths. In January, 1813, there was the same agitation, the same incoherence of thought and loquacity. She walks much, talks incessantly, and commits a thousand extravagances. She embroiders upon the thick linen cloth of her garments, strange and shapeless designs; cuts them into fragments, and makes presents of them. She persuades herself that men come to find her while in bed; and treats with affection, now one, and now another, in order to form an estimate of them by their discourses. She addresses one as if she were jealous; another, as if she were satisfied with him. The sight of her relatives does not modify the malady. May: she suffers from emaciation and extreme agitation. In the month of June, I order affusions of cold water. The first is given with water at fourteen degrees, (Reaumur.) This is succeeded by a chill, which lasts during the whole day. On the day following, she is composed; delirium the same. Three days after, new affusions; followed by composure, more distinctly marked. On the following days, the affusions are continued, and the patient is each day more rational, and remains more willingly in place. August: she reasons correctly, and labors, but remains hysterical. She is, at length, discharged, during the month of September, perfectly cured, after a malady of twenty-two months' duration.

Mad'lle Florence Angelica M., eighteen years of age, of a delicate constitution, nervous temperament, and subject to cephalalgia, is of an obstinate and violent disposition. She had variola during her first year. At eight years of age, she was admitted into the Maison Royale de la rue Barbette, where she remained until she was seventeen. During her residence here, she distin-

guished herself by her aptitude and devotion to labor. She meets with a fall upon her head, when seventeen and a half years of age. She suffered habitually from cold feet, and her hands were of a purple color. The menses were established at the age of eighteen without accident. They were regular, but scanty. During the months of January and February, she devoted herself night and day to labor, preparing to submit the proofs necessary to obtain a certificate from the governess. On the 14th of March, having eaten flesh during lent, she went twice to confession. After the first, she reproached herself with having offended God. After the second one, notwithstanding the consolations that the confessor had offered her, she was surprised weeping and sobbing; pretending that she had been threatened to a frightful extent. She was bled and bathed without any special effect. April 2d, she was brought to the Saltpêtrière. At the time of her admission, she is weeping; calling for her mother; wishing to go out; worrying and talking much, and very incoherently. On the third day, she was greatly agitated, and made incoherent and obscene remarks. On the 10th of April, after her admission at the Saltpêtrière, she suffered from extreme agitation and fury, and goes about almost naked. A douche composes her. On the 15th, and following days, her agitation remains the same. Tepid baths are administered. I also order affusions of cold water at the temperature of fourteen degrees, (Reaumur.) The first produced no appreciable effect. Two days afterwards, we conduct the young patient into the bathing rooms, in order to administer new affusions. She employed all her power of resistance to prevent it. Her efforts were useless. After fifteen minutes, she was taken with a chill, her teeth chattered forcibly, the limbs were incapable of supporting the weight of the body, and the pulse was small, slow and concentrated. She was carried to her bed, and immediately fell asleep. The sleep lasted four hours, during which a copious perspiration was established. On awaking, her reason was perfect; since which, she has not had a moment's delirium. Placed on the following day, in the division of the convalescents, she conducts in the most rational and proper manner. She manifested a strong desire to see her family once more. After a trial of some days' continuance, an interview with her relatives was permitted, and followed by no unpleasant consequences, notwithstanding the excitement of the mother of our convalescent. At length, after the enjoyment of good health for two months, she was restored to her family.

M. F. L., twenty-four years of age, a laundress, of a sanguine temperament, of a lively, passionate disposition, and very choleric, was admitted at the Salpêtrière, Feb. 19th, 1812. At the age of five years she had variola; at six, psora; at seven she was violated, and had syphilis; and at fourteen, the menses made their appearance spontaneously, and have since been regular. She was confined Feb. 9th, 1812, and six days after her confinement, went to washing in cold water. On her return, she was seized with a chill, a circumstance which did not prevent her from going to see two women, who were fastened by an iron collar to a post. She returns from this hideous spectacle in a state of delirium. On the 19th, ten days after her confinement, she is admitted at the hospital. At my visit, on the following morning, I found this woman very much agitated, and very delirious; crying and talking incessantly. Her breasts were hard and engorged. Camphorated liniments are applied to them, and on the 24th, the engorgement had subsided. Convulsions supervene, which are daily renewed at different hours, and preceded by cries. The eyes are convulsively raised, and the face strongly injected. White and frothy saliva flows from the mouth. After this discharge, the patient talks much. March 2d, there is general delirium, loquacity, and extreme agitation. She no longer knows those who surround her, and often pronounces the name of the same individual. May; delirium the same. June; a little more compos-

ed in her movements; while her incoherence and loquacity have not diminished. July; same condition. Tepid baths and laxative drinks produce no amelioration. Aug.; a blister is applied between the shoulders, without any appreciable effect. Dec.; appearance of the menses, without diminution of the delirium and agitation. Winter occasions no change in this condition. In the month of June, 1813, I subject the patient to affusions of cold water, which are repeated for several successive days. There is a febrile reaction after each affusion, and the delirium is lessened. We observe manifest improvement daily, and her restoration is complete by the close of July. The menses are restored and regular. At length she returns to her family. Since leaving the hospital, she has had three favorable confinements, without suffering any derangement of health in consequence of them.

J., fifteen years of age, was admitted at Charenton, Aug. 13th, 1836. He was then in a state of dementia, bordering on insensibility, in consequence of onanism. The skin of this young patient was discolored, his large blue eyes were dull and puffed up, and his step unsteady; though he walked a little. He spoke not, and scarcely replied in monosyllables; not seeming to comprehend the questions that were put to him. I subject him to affusions at a temperature of 14° (Reaumur). The rigor was well marked; and it was several hours before the patient recovered his natural warmth. After the second affusion, I ordered frictions with woolen cloth, along the spine, and upon the inferior extremities. After the sixth affusion, the countenance of the patient became animated, and it seemed to himself that he had just awoke. By slow degrees, the vital forces were reëstablished. He walked with more assurance, and replied more willingly and correctly to such questions as were put to him, and called for a larger quantity of food. Fifteen affusions proved sufficient to effect his cure.

During the summer of 1813, I submit four maniacs to affusions of cold water. One of the four women could not recover the vital heat within twelve hours. She then slept, and was well, on waking. Reaction was slight in the cases of the three others, but the activity of the delirium was lessened, and they were cured a few days after, without the employment of any farther affusions. They have often succeeded, either by arousing and exciting the dormant forces, or by recalling to the surface the too concentrated innervation. It is however very certain, that this powerful therapeutic agent does not act in the same manner, upon all subjects. Young J., exhausted by onanism, was pale, anasarcous, and in a state of dementia; and affusions had a tonic action; while the other insane persons were maniacs. It is evident, that with them the affusions produced a salutary febrile reaction. In the case of the fourth, the cure was effected, less by the physical action of the cold water, than by the moral influence of this species of medication. Douches of cold water upon the head have, even to our day, been regarded as a specific in mania. They produce a sedative physical action, in consequence of the cold, and a moral action, as a means of repression. The greater part of convalescents say, in general, that they have derived benefit from them. Some maniacs demand the use of this agent, but we must be careful not to abuse it.

If mania is complicated with excitement of the reproductive organs, we compose them, by means of tepid and demi-baths, by enemata, cold or prepared with opiates, hyoscyamus, assafœtida, water of the lauro-cerasus, etc. We have, in these cases, recommended the use of the acetate of lead internally, and camphor combined with vinegar. There are however, forms of mania, which resist a treatment directed according to the most approved therapeutic views. We must then have recourse to a perturbating plan of treatment, and to empiricism even, when a wise and experienced physician controls its application. When a maniac is young, strong, robust, well nourished

and plethoric, we may repeat blood-letting. I have found benefit from the application of three or four leeches to the anus, renewed every eight or fifteen days, according to the state of the vital forces. I encourage a flux towards the hemorrhoidal vessels, by hip baths or aloes. To diminish the impulse of blood towards the brain, we apply ice to the head. We maintain, by means of a spunge or linen cloth, cold water, or water and vinegar, in contact with the head of the maniac, whilst he is in a warm bath, or his feet in hot water. Use has been made of drastics, and other purgative medicine. They succeed, by occasioning a strong irritation upon the alimentary canal, which thus relieves the brain. Drastics provoke the evacuation of brown, pitchy, mucous matters; the presence of which continue the delirium. When maniacs refuse all medicines, and we wish to act on the alimentary canal, we may mingle a purgative with their food, and prescribe an emetic drink; we employ frictions of *croton oil* upon the abdomen, have recourse to enemata, and even the douche ascendante.

It must not be forgotten, that in mania, constipation is as fatal as liquid and abundant dejections. In ordering purgatives, we should be cautious that the extremely suspicious maniacs do not get an impression that we are administering substances, suited to poison them. In the employment of drastics, and even purgatives, it will be found advantageous to alternate them with tepid baths. Baths moderate the general irritation, caused by evacuants. Areteus made great use of distilled vinegar. Locher also boasts of its use, and Chiaruggi has combined it with camphor in the following formula:

℞

G. Camphoræ	ʒi	à	ʒii
Aceti distillat.	fʒii	à	fʒiv

Mix.

Of this mixture, a table spoonful is to be taken, diffused in some vehicle.

A young woman who was insane, and had been cured, after having swallowed an ointment containing not less than twenty grains of opium, the attention of practitioners was directed particularly to the effect of narcotics. These medicines are not suited to cases of plethora. Valsalva and Morgagni proscribed opium; though the former states that he has cured several maniacs, by putting them upon the use of an infusion of poppy. Doctors Sutton and Péry have cured, with opium, maniacs who were tormented with thirst and insomnia. M. Péry assures us, that he has employed it, in the quantity of sixty-four grains a day. Several English physicians, and particularly Doctor Locher, who has long been at the head of the hospital for the insane at Vienna, speak in the highest terms of the digitalis purpurea. He was in the habit of employing it in substance, in the dose of from one, to twenty and thirty grains, twice a day. The English prescribe its tincture, in doses of from twenty to fifty drops twice or thrice a day. I have elsewhere said, that we should regard the bath of surprise, as a perturbating and empirical remedy. Van Helmont was accustomed to submerge maniacs; a barbarous measure, by means of which, they formerly believed themselves able, successfully to combat epilepsy. This author recommended, that the submersion should be prolonged until a state bordering upon death was induced, in order, he was accustomed to say, to annihilate the last traces of their maniacal extravagances. In accordance with this view, establishments for the treatment of the insane were erected near rivers, into which they threw their patients, bound hand and foot. Boerhaäve and Van-Swieten gave the same advice. Cullen proposes immersion in cold water, in order to provoke a chill, and its consequent reaction.

Many facts which have been observed in England, by Doctors Mason Cox, Haslam and Fox; and the experiments made at Berlin, by Doctors Hufeland and Horn; seemed to favor the employment of the rotatory machine. Why do men so skillful, attempt to introduce into practice an agent so dangerous! The rotatory machine is now every where abandoned. The moxa, applied to the crown of the head, has been proposed. I confess that I have never employed it in mania; though I have often tried it without benefit in dementia complicated with paralysis. Is it not to be feared that the application of fire, by destroying the hairy-scalp, will determine consecutively, inflammation within the cranium? Such was the opinion of professor Chaussier. Doctor Valentin of Nancy, has announced the good effects of the actual cautery, applied to the neck. I can affirm that this means has sometimes succeeded in my hands, in the most furious mania, and even upon subjects very much emaciated, and extremely irritable. It may moreover, have a frightful moral influence; and I have seen women at the Salpêtrière, who, incapable of understanding this act, cried out on seeing the red-hot iron, and proclaimed their innocence of crimes which deserved the *mark*, (a brand to which certain criminals are condemned). This measure, like all perturbating agents, aside from its physical action, produces a moral effect, as the following facts show. In a case of mania attended with fury, which occurred in the person of a young female, I wished to apply the iron at a red heat whilst she was in the bath. It merely reddened the skin; but the patient immediately came to herself, and soon recovered the use of her reason. This girl, whom fear cured, has since remained in the house in the capacity of a domestic.

V. V. P., twenty-six years of age, and of a lymphatic temperament, becomes a maniac during the month of April, 1823. She is bled and bathed at home, but without success. She is admitted at the Saltpêtrière on the 26th day of May following, in a state of mania, attended with a degree of agitation and fury, which nothing composes. In the month of October, I apply the actual cautery to the neck. The preparations for this operation disturb her much. Scarcely has the red hot iron been applied to her neck, when, to her cries and agitation, succeeds a moment of silence. She then sheds a torrent of tears, and afterwards makes regular progress towards recovery, which is perfected at the expiration of two weeks. She still remained for some time in the division of convalescents, and returned to her family, November 19th, of the same year.

A girl, twenty years of age, tall, and of a robust constitution, is brought to the Salpêtrière in a state of very violent mania. The means usually employed, do not change her state, and I decide upon applying the actual cautery to the neck. All the preparations being made, we employ force to hold the patient. She is so much frightened, on seeing the hot iron, that she redoubles her efforts to avoid it. She is restrained by force, but so soon as she feels the iron approach, she repeats her efforts, frees herself from the hands of the assistants, and remains for five minutes in the enjoyment of perfect reason. She inquires with composure what they wish to do with her, and earnestly entreats that she may be spared. I consent to defer the application of the iron, on condition that the patient will from henceforth remain rational and tranquil. She promises, and keeps her word.

In two days, she is transferred to the division of the convalescents, and is soon perfectly restored. She declared that the fright she had experienced, at sight of the hot iron, had contributed to her cure. Iron heated in boiling water, may be substituted for that which is heated in the fire. It is an agent less frightful to patients, and less energetic; but which composes maniacs, especially when the integuments of the head appear gorged with blood. I will speak of the application of cups to the neck. In order to do this, we shave the hair

from the posterior region of the head, and apply a number of them to the nape, the neck, and shoulders; scarify to a greater or less depth, and then apply cold lotions to the head.

Such are the remedial agents which have been signalized as suited to combat mania. We cannot deny that the successes attributed to heroic remedies, are far less numerous than the cures obtained by a suitable direction given to the maniacs themselves, and those who serve them, by a proper regimen, and wise expectation; and that it is better to trust to time and the efforts of nature, than to the employment of remedies, often hazardous, rarely useful, and sometimes dangerous. Finally, in enumerating the principal medicines proposed, to overcome one of the most formidable of maladies, it will not be supposed that I advise the employment of them all, even successively, in each case of mania. I am to suppose that the well educated physician will here expect only the general indications, respecting the employment of the therapeutic agents already tested. Each must make that application of them to individual cases, which his wisdom, experience and discernment may suggest.

[There are several points connected with the treatment of mania to which it may be proper to refer; not because they are new, or supposed to furnish the basis of novel views; but rather because mankind are prone to forget, or fail to practice much that is of vital consequence to their welfare and happiness. Our author in this chapter describes that form of insanity which has probably led to more cold-blooded cruelty and abuse; and to a greater amount of inappropriate medical and moral treatment, than all the others united. It was upon the chafed and abraded limbs of the maniac, that was once heard the clanking of chains; upon his lacerated flesh that was once seen the marks of the scourge; and upon his features the impress of that rage, which unkindness had engendered. It was the maniac too, for whom the dungeon was prepared; whose bed was straw, and who, partly from fear we may in charity suppose—and partly also from indifference on the part of those in charge of him, was permitted, month after month, to roll in his nakedness amid his own ordure. Such was, until too recently, the condition of the maniac who, previous to his attack, might have occupied the most intimate relations towards those by whom he was surrounded.

From the statement of our author, as well as from those which every year appear in the published reports of our Institutions for the treatment of Insanity, we learn that this fearful form of mental derangement is that which, in its earlier stage, admits most readily of cure. Would that the public understood this inexpressibly important truth! Would that physicians generally, were fully alive to the magnitude of the evil, and the certainty, if promptly and judiciously treated, of its cure! We might then hope that mania, with all its terrible consequences, would less frequently prove the lot of man. This very class of the insane, above all others, need the peculiar privileges of these Institutions. For the maniac were they constructed; not exclusively, but with special reference to their wants; and provided with all the appliances requisite for their comfort and successful management. A distrust of the efficacy of treatment on the one hand—growing out of a belief, it may be, that nothing can be done for one in this unhappy condition—and on the other, a false notion that these Institutions are money-making Establishments, doubtless deter many uninformed persons from applying to them for aid, in behalf of their suffering relatives. The fact is, they owe their origin to the exercise of the largest philanthropy; and a benevolence that spurns reward, has ever actuated their generous guardians and supporters. Let them then become the recipients of all whom this terrible visitation afflicts, both because of the manifold comforts which they afford, the cures which in a large majority of cases we may confidently anticipate as the result of their treatment, and the great economy connected with this practice.

I am induced to add the following tables, illustrative of the latter consideration. Their accuracy has been corroborated by similar investigations, at several different Institutions. They were prepared at the request of a Committee of the Legislature of Connecticut, in the spring of 1843.

TABLE I.

Showing the expense, etc. of supporting twenty Chronic cases of Insanity now in the Retreat at Hartford, Conn.

	No.	Present Age.	Time at Expense.	Total Expense.
	1	45 years.	19 years.	$3,458
	2	43	18	3,776
	3	39	13	2,366
	4	32	11	2,062
	5	31	10	1,820
	6	29	9	1,638
	7	33	9	1,638
	8	41	9	1,638
	9	27	7	1,274
	10	28	7	1,274
	11	44	19	3,458
	12	61	18	3,276
	13	39	15	2,730
	14	47	14	2,548
	15	35	14	2,548
	16	30	14	2,548
	17	45	13	2,366
	18	57	11	2,002
	19	53	11	1,002
	20	33	10	1,820
Aggregate.		792 years.	241 years.	$44,782
Average.		39.6	12.05	$2,239 10 cts.

TABLE II.

Showing the expense of supporting twenty recent cases of Insanity, last discharged from the same Institution, cured.

	No.	Present Age.	Time at Expense.	Total Exp.
	1	19 years.	3 m. 0 w. 0 d.	$45 00
	2	54	3 1 4	50 00
	3	17	3 7 6	73 00
	4	34	3 0 3	47 00
	5	45	3 6 2	67 50
	6	47	6 0 1	91 50
	7	35	3 0 5	48 50
	8	32	3 0 0	45 50
	9	37	8 0 0	121 00
	10	40	3 0 4	47 50
	11	21	6 2 1	98 50
	12	60	3 0 0	45 00
	13	45	2 1 3	45 50
	14	30	2 0 4	45 50
	15	47	3 1 0	49 00
	16	21	3 3 0	56 00
	17	59	3 0 0	45 00
	18	26	14 3 0	202 50
	19	30	2 2 4	37 00
	20	44	1 1 2	45 50
Aggregate.		733 years.	7 y. 1 m. 0 w. 4 d.	$1,308 30
Average.		36.65	119.2 d.	$65 80

TABLE III.

Aggregates and Averages of Chronic and Recent Cases compared.

Aggregates.	Ages.	Time at Expense.	Total Expenses.
Chronic cases.	792 years.	241 years.	$44,782 00
Recent cases.	733	7 y. 1 m. 0 w. 4 d.	1,308 00
Averages.			
Chronic cases.	39.6 years.	12.05 years.	2,239 10
Recent cases.	36.65	119.2 days.	65 80

The tables contain a list of twenty chronic and twenty recent cases of insanity, the former embracing those who have been longest resident at the Retreat for the Insane; the latter those who have recently been discharged cured, in their order.

The average age of those who have been found to be incurable is 39.6 years,—average time spent at the Retreat 12.5 years, and the average expense incurred, $2,239 10.

Their aggregate ages are 792 years,—the whole period spent at the Institution 241 years, and the sum total of their expenses, exclusive of clothing, $44,782.

All are enjoying a comfortable measure of bodily health, and will probably live, most of them, materially to increase the enormous expense which their deplorable malady has already rendered necessary.

Of the recent cases it appears that the average age is 36.65 years,—the average time spent at the Retreat 119.2 days, or a little less than four months, and the average expense $65 80.

The aggregate ages of all those contained in this list are 733 years,—the aggregate amount of time spent by them at the Institution, seven years one month and four days, and their whole expense exclusive of clothing, $1,308.

These two truths,—than which none are more thoroughly established,—that the maniac is, in a large majority of cases restored to health, if submitted early to appropriate treatment, and that a large, and in many instances a ruinous expense, is in this way avoided,—aside from other momentous considerations—it is hoped, will result in extending the benefits of our Institutions for the Insane, to all who may need their aid. I cannot refrain from noticing with commendation the remarks, and cases illustrative of the moral treatment of this class of the insane. From the period when the immortal Pinel first made the experiment of unloosing the fetters of the maniac, and leaving him free, to move at will about the wards and courts appropriated to his use, until the present day, there has been a constantly increasing amelioration of the treatment of this unfortunate class. Indeed, a sort of generous rivalry has come to exist in our public Institutions, as to which exercises the least degree of physical restraint. A good practice however may be carried to an extreme. Every true philanthropist, who is at all acquainted with this class of the insane, must know, that at times, both humanity and benevolence call aloud for the personal restraint of the maniac. The character of this restraint must vary, as well as the time for which it is required. It is hoped that this principle will be admitted to prevail in all our Institutions, and that a limited and peculiar "definition" of the term, may not lead the public to an incorrect conclusion in regard to it. With respect to opium, it may be proper to remark once more, that in the opinion of several superintendents of public Institutions, in connection with tonics, it is regarded as the sheet-anchor in this form of insanity. In general, an intense degree of nervous excitement,—a degree which utterly precludes sleep, except as the result of exhaustion,—and which leads to unremitted activity,—characterizes mania. It is to curb this excitement, to soothe this irritability, and induce repose, that this remedy is proposed. In numerous instances, its employment is unquestionably advantageous. It ought however in every case to be used, subject to such restrictions as were suggested in the chapter on Insanity. Digitalis, while it is not excluded from the list of remedies employed in public Institutions, is far from being a common remedy. In a single case of continued mania, where it was believed that its use might be attended with favorable results, it was employed for a considerable period, its constitutional impression produced, and continued for some time, but without success. Moxas and the potential cautery have, for the most part been abandoned. The milder forms of counter-irritation are now preferred, and generally, the tartar emetic ointment and seton are the most potent agents of this class now in use.]

DEMENTIA.

Definition of term.—Description of the mental manifestations of a demented person.—Physical characteristics.—Paralytic complications.—Dementia, acute or chronic, simple or complicated; continued, remittent or intermittent.—Compared with mania and monomania.—Cases illustrative of the decline from mania and monomania, to dementia.—Distinction between dementia and imbecility and idiotism.—Signification of term *insensate*.—Its causes, complications, terminations and changes which post-mortem examinations reveal.—Influence of age.—TABLE OF AGES.—Exciting causes of dementia.—TABLE OF CAUSES.—Physical and moral causes.—Remarks on the causes of dementia.—Varieties and complications of dementia.—Maladies to which the demented succumb, etc.—Table of the principal organic lesions.—Extended description of the condition of the contents of the great cavities, as revealed by post-mortem examinations.—Illustrative cases.—Remarks with reference to the above cases.—Acute dementia.—Causes.—Invasion.—Treatment.—Termination.—Illustrative case.—Chronic dementia.—Causes.—Course.—Treatment and termination.—Third variety.—Senile dementia—Cause.—Progress.—Treatment and termination.—Complicated varieties.—Complications.—Incurable.—Invasion gradual.—Extreme limits of this disease, usually from one to three years.—Phenomena of the last period of life.—Cases.—Comparative frequency of paralysis connected with dementia in different countries.—Several authors cited on this point, German, Italian and English.—Pathology and periods, as indicated by Bayle. Symptoms of paralysis usually, indicative of a fatal termination.—Sometimes existing very early in an attack of insanity.—Cases.—Delirium sometimes ceases, while the paralysis persists.—Case.—Practical considerations.—(*Brief extracts from other writers with reference to the paralysis sometimes connected with dementia.*)

DEMENTIA is a cerebral affection, usually chronic and unattended by fever, and characterized by a weakening of the sensibility, understanding and will. Incoherence of ideas, and a want of intellectual and moral spontaneity, are the signs of this affection. Man in a state of dementia, has lost the faculty of perceiving objects correctly, of seizing upon their relations, comparing them, and producing a distinct remembrance of them. Hence results the impossibility of reasoning correctly. In dementia, impressions are unnaturally feeble, either because the sensibility of the organs of sensation is enfeebled; or because the organs of transmission have lost their activity; or because, finally, the brain itself no longer possesses the power to perceive, and re-

tain the impression which is transmitted to it:—from whence it results, that sensations are feeble, obscure and incomplete. Individuals in a state of dementia, are incapable of concentrating their attention sufficiently; and being incapable of forming a clear and correct notion of objects, they can neither compare nor associate ideas; nor have they the power of abstraction. The organ of thought has not sufficient energy, and is deprived of the tonic force, requisite for the integrity of its functions. Hence ideas, the most unlike, succeed, independently one of another; and follow without either connection or motive. Their conversation is incoherent, and the patients repeat words and entire sentences, without attaching to them any precise signification. They speak as they reason, without a consciousness of what they are saying. It seems that they have sentiments treasured up in their minds, which they repeat in obedience to the force of former habits, or yielding to fortuitous congruities.

Many of those who are in a state of dementia, have lost their memory, even of those things which are most intimately connected with their existence. But it is especially the faculty of recalling impressions recently made, which is essentially changed. They possess only the memory of old persons. They forget in a moment, what they have just seen, heard, said or done. It is the memory of things present which is wanting to them; or rather, memory does not betray them, because the sensations being very feeble, as well as the perceptions, scarcely a trace is left after them. Many also are irrational, only because the intermediate ideas do not connect those which precede and follow. We clearly perceive breaks, which it would be necessary to fill up, in order to give to their discourses the arrangement, filiation and perfection, which belongs to a connected and complete process of reasoning. The energy of the sensibility and intellectual faculties, which is always in proportion to the activity of the passions, being almost extinct, the latter are null, or almost so, in dementia. The insane, in a state of dementia, have neither desires nor aversions; neither hatred nor tenderness. They entertain the most perfect indifference towards objects that were once most dear. They see their relatives and friends without pleasure, and leave them without regret. They are not uneasy in consequence of the privations that are imposed upon them, and rejoice little at the pleasures which are procured for them. What is passing around them, no longer awakens interest; and the events of life are of little account, because they can connect themselves with no remembrances, nor any hope. Indifferent to every thing, nothing affects them. They sport and play, when others are in affliction. They shed tears and utter complaints, when every body else is happy, and when they ought to be so themselves. If their position is unpleasant, they do nothing to change it. The brain being in a state of atony, and no longer furnishing sensations for the production of ideas upon which to reason, nor data upon which to form a judgment, the determinations are vague, uncertain, variable, without aim, and passionless. Those who are in a state of dementia, are destitute of spontaneity. They no longer determine, but abandon themselves; yielding implicitly to the will of others. Their obedience however is passive, and they have not sufficient energy to be intractable. They are often also the sport of those who wish to take advantage of this dreadful condition. Notwithstanding, they are irascible, like all feeble beings, and those whose intellectual faculties are weak or limited. Their anger however, is only of a moment's duration. It has no permanence like that of maniacs, and particularly those suffering from lypemania. They are so feeble that their fury must necessarily be of short duration, and they can but for a brief period, sustain so great an effort.

Almost all who have fallen into a state of dementia, have *some sort of ridiculous habit or passion.* Some are constantly walking about, as if seeking something that they do not find. The gait of others is slow, and they walk

with difficulty. Others still, pass days, months and years, seated in the same place, drawn up in bed, or extended upon the ground. This one is constantly writing, but his sentiments have no connection or coherency. Words succeed words; relating sometimes to his former habits and affections. We can sometimes recognize amidst the incoherence and confusion of what they write, a word or phrase which they repeat, and which is the result of memory. They are the fixed ideas which characterize their delirium, when monomania has preceded dementia. Their writing is always changed, bad, and not easily recognized. There are some patients who cannot trace a letter, or select those which could form the shortest, and most familiar word. These wretched beings are equally unskillful in all the useful arts or accomplishments which they cultivated with success before their illness. One, in an interminable babble, speaks in a loud voice, constantly repeating the same words. Another, with a sort of continued murmur, utters in a very low tone, certain imperfectly articulated sounds; commencing a phrase without being able to finish it. The latter does not speak; while the former beats with his hands, both night and day; his neighbor at the same time, balancing his body in the same direction, with a degree of monotony, very fatiguing even to an observer. One murmurs, rejoices, weeps and laughs at the same time; another sings, whistles and dances during the whole day. Many clothe themselves in a ridiculous manner, and take possession of whatever they meet with, in order to fit them to their ordinarily filthy garment, affecting a singular costume which is always disordered and strange.

To this disturbance of the soundness of the understanding, are united the following symptoms. The face is pale, the eyes dull, and moistened with tears, the pupils dilated, the look uncertain, and the physiognomy without expression. The body is now emaciated and slender; and now loaded with flesh; the face full, the conjunctivæ injected, and the neck short. The functions of organic life maintain their integrity. Sleep, ordinarily profound and prolonged, is daily renewed, the appetite becomes voracious, and the alvine evacuations are consistent, and sometimes liquid. In very many cases, the lymphatic system predominates, and such persons acquire much flesh. It often happens, that when mania or monomania tends to dementia, this frightful termination is announced by obesity. When paralysis complicates dementia, the paralytic symptoms are manifested successively. At first, articulation is embarrassed; shortly after, locomotion is executed with difficulty; and the arms are moved but with pain. Finally, the dejections become involuntary. None of these epiphenomena ought to be regarded as symptoms of dementia, more than the signs of scurvy, which often complicates this malady. Dementia is acute or chronic; simple or complicated; continued, remittent, or intermittent. Dementia differs essentially from mania, and particularly monomania. In these latter, the faculties are especially disturbed. Maniacs are irrational, in consequence of excitement. There is a wandering and exaltation of the understanding, and their delirium depends upon a convulsive condition of the nervous and cerebral system. In monomania, there is also an exaltation, as well as fixedness and tension of the sensibility. Maniacs and monomaniacs are drawn away by errors of sensation, by false perceptions, hallucinations, and the abundance and fixedness of the ideas and affections. He who is in a state of dementia imagines not, nor indulges in thought. He has few or no ideas. He neither wills nor determines, but yields; the brain being in a weakened state. Whilst in the case of the maniac and melancholic, every thing indicates strength, power and effort; with the person in dementia, every thing betrays weakness, relaxation and feebleness. Dementia can no longer with propriety be confounded with monomania, to which, in some cases, it presents resemblances. It will not prove useless to observe with care, the pro-

gress from mania and monomania to dementia; and with the view to illustrate this point, I relate the two following cases.

P. J. D., a merchant twenty-nine years of age, of a gay and very active disposition, has taken a great amount of mercury, to remove two successive attacks of blennorrhagia. When twenty-eight years of age, he meets with serious losses in business, which are succeeded by depression of mind. Some months subsequently, he manifests indifference about his affairs, which he neglects; and prejudices against his family, particularly his mother. He suffers from inappetence, does not sleep, and refuses to take food, through fear of poison; and is ever employed in discovering and baffling the designs of his pretended enemies. Previous to this period, the change in his disposition, the perversion of his affections, the abandonment of his business, and the fear of poison, characterize the delirium, to which succeed gay and ambitious notions. The patient indulges in every variety of error in regimen. At the expiration of four months, he suddenly, during the month of May, 1836, complains of a violent cephalalgia, and condemns himself to repose, silence, and the most abstemious diet. His tongue, at this time, appeared embarrassed. On the 8th of June, 1836, he is admitted at Charenton; does not walk, is emaciated, and remains standing near his bed, with his head inclined, his arms hanging by his side, his look and physiognomy changeless. He seems a stranger to all who surround him; replies not to the questions that are addressed to him, nor to those proofs of kindness that are shown him. He perseveringly refuses food, and constipation is obstinate. Two purgative enemata provoke the evacuation of brown, hard and dry matter. On the 9th of June, the patient is carried to the bath, notwithstanding his efforts to the contrary; remains there two hours, and eats with an appetite, soon after leaving it. His face is animated, and his physiognomy changeful. On the following day,—the 10th,—he is agitated, complains of his relatives, and particularly of his mother; demands his liberty, talks incessantly, cries, walks about with spirit, overturns whatever he meets with, and expresses in abusive terms, his resentment towards his family, who wish him to die by a slow fire. Is he in the court, he indulges in loud laughter, walks at a rapid pace, cries, howls, etc., etc. If he is checked, and efforts made to fix his attention, he affirms that his enemies are tormenting him. He sees and hears them every where, both night and day; and it is his mother in particular, who reproaches him. By degrees, the patient becomes more composed, and after some days, we grant him more liberty; and at a later period, he passes into the division of convalescents. He no longer suffers from hallucinations, nor entertains prejudices. His conversation is connected, but he remains isolated, engages in no diversions, and performs strange acts. Admitted to the table of convalescents, he eats with voracity, or not at all; and contents himself with drinking at a draught, the wine that is served out to him. He laughs loudly, or appears to be absorbed by some thought which engages him. At the close of August, the agitation returned. He runs, sings and laughs; clapping his hands, holding the most incoherent conversation, and accusing anew, both his mother and family. He does not eat, but drinks a large quantity of water. From excitement, the patient passes without transition into a state entirely opposite. His head is inclined, his eyes fixed and dull, and his insensibility to external objects complete. On rising, he must be dressed, and remains wherever he is placed.

An abundance of mucus discharges from his mouth and nose; constipation is obstinate; the urine involuntary; and he refuses food. He closes his jaws whenever an attempt is made to administer liquids of any kind. It is necessary to undress him for bed; and he remains in just the position, in which the attendants place him. He maintains a profound silence which nothing overcomes. His emaciation is rapid, and very manifest. Aspersions of cold

water upon the face, made unexpectedly, seem to awake the patient again. His complexion is fresh; his eyes and physiognomy animated. He calls for food, which he eats voraciously. This measure however, ultimately fails, as well as the douche, which was administered at a later period. At last, he sinks again into a stupor, from which nothing arouses him.

Thus was manifested alternately, a state of maniacal lypemania, and profound stupor. Sometimes we succeed in causing the patient to eat, by accosting and inviting him in a brusk manner, to take food. If he refuses at first, every new attempt is vain. Sometimes also, if we approach him he extends his hand, utters a few words, and ceases to reply; especially if we refer to his position. During his lucid intervals, which are of short duration, he converses readily and with cheerfulness. Is he interrogated as to what passes in his mind during these seasons of stupor? "In this state, he replies, my understanding is null. I do not speak, nor do I see or hear anything. If I see or comprehend any thing, I maintain silence, not having the courage to reply. This want of activity depends upon the fact, *that my sensations are too feeble to act upon my will.*" A remarkable feature in the case of this patient was, his excessive repugnance to speak of his malady. If questioned upon this point, he avoids making any reply; or, if he replies, it is very briefly, and turns the conversation. If enquiries are still made, he becomes silent, bows his head, and relapses into a stupor, or leaves the querist without making any reply. This patient passed the winter and a part of the spring, in this state of alternate agitation and stupor. He was returned to his family, when, after a two months' trial, they were obliged to bring him back again to Charenton, where he was admitted August 9th, 1837, in a state of complete stupor. This was not a case of simple dementia, for the patient, although apparently insensible to what was passing around him, was not however, deprived of understanding, and possessed great strength of will. We observe in his physiognomy the expression of certain sentiments, which do not exist in complete dementia. He was capable of resisting obstinately, what was desired of him. I have seen several insane persons who, in a similar condition, were very dangerous. It was necessary to watch them with great care; since, when relieved at intervals, of their habitual stupor, they attempted the most fatal acts.

P. L. Fr., of Swiss origin, twenty-seven years of age, of medium size and a bilious-sanguine temperament, has a swarthy and sallow complexion, auburn hair, blue eyes, a voluminous and almost spherical head, and a forehead largely developed and wrinkled. There is a circular depression, on a line with the superior angle of the occipital bone. In consequence of an altercation with his officers, he lost his rank of quarter-master. Wounded in his interests and self-love, he becomes sad, brusk and absent-minded; and after some weeks, is seized with general delirium. He talks incessantly, and gives himself up to the commission of disorderly acts, rending and breaking whatever comes within his reach. Conducted to the hospital of the guard, he is treated for six weeks, and is sent from thence to Charenton, November 5th, 1827, in a state of mania attended with fury. In the month of February, 1828, ulcers form upon the limbs, which he is constantly lacerating. It is found necessary to confine him to an arm-chair, to prevent his walking, and to keep his hands from the sores. Besides the incoherence of his ideas, his agitation and loquacity, a slight difficulty in pronunciation is observed. By degrees, the fury ceases; composure is induced, and the difficulty of articulating sounds becomes more marked, and his ideas more incoherent and less energetic. For eight years, he has been in the first stage of dementia, preserving some slight traces of mania, which appears from time to time. The functions of organic life are healthfully executed, the appetite is voracious, and the sleep ordinarily good. Notwithstanding, the lower extremities are edematous. He is indifferent with respect to his position, and his conversation is incohe-

rent. He utters words without connection or energy, or else maintains a perfect silence. Rarely does he reply; and when he does, his responses are in no way connected with the questions that are addressed to him. They are returned slowly, and sometimes instead of replying, he utters abuse. Sometimes also, he seems to have hallucinations of hearing, and *talks to the walls*. He passes much of the day, sitting upon his heels on an arm-chair; his head reclining upon his chest, and his eyes dull and fixed. Does any one endeavor to attract his attention, he sometimes replies to questions relative to his native country, and his lodging room, but does not recognize those persons who come to see him. He never speaks of his family, and continues to entertain the most perfect indifference respecting his position.

Dementia must not be confounded with imbecility or idiotism. In imbecility, neither the understanding nor sensibility have been sufficiently developed. He who is in a state of dementia, has lost these faculties to a very considerable degree. The former can neither look backward, nor into the future; the latter has recollections and reminiscences. Imbeciles are remarkable by their conversation and acts; which greatly resemble infancy. The conversation and manners of the insensate, bear the impress of their former state. Idiots and cretins have never possessed either memory or judgment. Scarcely do they present the features of animal instinct; and their external conformation indicates clearly enough, that they are not organized for thought. There exists therefore, a form of mental alienation which is very distinct, in which the disorder of the ideas, affections and determinations, is characterized by feebleness, and by the abolition, more or less marked, of all the sensitive, intellectual and voluntary faculties. This is *dementia*. If, as I hope, I have clearly fixed the signification of this word, it will no longer be confounded with mania, monomania and imbecility, as is daily done; while the word *insensate*, being reserved for individuals who are in a state of dementia, will no longer designate maniacs, imbeciles or monomaniacs.

After having unfolded the signs of dementia, and the characters which cause it to be distinguished from other forms of mental alienation, I will hastily point out the causes which produce it; the diseases that complicate it; those which terminate it; and the principal changes which the post-mortem examinations of those who die in this condition reveal. I will close, by stating my opinion respecting the paralysis, which so often complicates this malady. The tables upon which the following considerations repose, embrace two hundred and thirty-five persons, who are affected with dementia. They are placed in two columns. One contains a report of those women in a state of dementia, whose cases were taken at the Salpêtrière, during the years 1811 and 1812. The other is made up from the insane of both sexes who are in a similar state, belonging to the wealthy, and higher classes of society, who were, during several years, admitted into my establishment.

INFLUENCE OF AGE.—TABLE OF AGES.

Ages.	Number of Individuals. 1st Column.	2d Column.	
15	2	1	
20	4	5	
25	9	14	97
30	14	9	
35	9	8	
40	13	9	

Ages.	1st Column.	2d Column.	
45	16	12	
50	20	15	
55	16	4	
60	16	1	138
65	10	1	
70	11	1	
75	13	1	
87	1	0	
	154	81	235

In casting a glance over the above table, we see that dementia is most frequent from forty to eighty years of age; for we have but ninety-seven persons, that is to say, a little more than one third, from birth to the age of forty years; while there remains one hundred and thirty-eight, or near two thirds, from the age of forty years and above. The age during which dementia is numerically most frequent, is from forty to fifty years; but, in comparison with the population, the frequency of this malady, is in a direct relation with the progress of age. The comparison of numbers in the two columns, presents to our notice, two very marked differences. First; the number of persons in a state of dementia, above the age of forty years in the second column, is much less than that in the first, because the report was made up from an establishment into which cases of senile insanity are never admitted; whilst at the Salpêtrière, all insane persons who present themselves, are indiscriminately received. Second; the number of cases of dementia under the age of forty years, is much greater in column second, relatively, than in column first, because those persons in a state of dementia, who constitute column second, belong to the higher classes of society, in which the abuse of pleasures, inordinate passions, and errors of regimen, destroy man, wear out the brain from early youth, dispose him to dementia, and urge him into a premature old age.

EXCITING CAUSES OF DEMENTIA.—TABLE OF CAUSES.

Physical Causes.

Menstrual disorders	15
Critical period	35
Consequences of confinement	8
Falls upon the head	3
Progress of age	49
Ataxic fever	3
Suppression of hemorrhoids	2
Mania	18
Monomania	15
Paralysis	5
Apoplexy	2
Syphilis, and abuse of mercury	3
Errors of regimen	6
Abuse of wine	6
Masturbation	11

Moral Causes.

Disappointed affection	5

Frights	7
Political shocks	8
Disappointed ambition	3
Want	5
Domestic trials	12
Unknown causes	14
Total	235

Like all forms of insanity, dementia depends upon a great variety of causes. Some are physical; others moral. These two orders of causes are sometimes complicated. A severe trial occurs, a few days after confinement; the lochia are suppressed, and dementia declares itself. A fright causes the menses to disappear, suppresses a cutaneous disease, and gives rise to a retrocession of gout; and dementia appears. Moral causes give rise to dementia, more frequently among women than men; and more readily among persons already affected with mental alienation, than those who enjoy the plenitude of their understanding. They are indeed so few, that I take an account of them, only for the purpose of showing how small is their proportion relatively, to the other varieties of insanity. They act with more energy in the higher classes of society than the lower. The disorders and cessation of the menses, cerebral fevers, chronic inflammations of the brain and its meninges, together with congestions, are the most frequent causes of dementia, especially in advanced life. The abuse of mercury, errors of regimen, onanism, epilepsy, syphilis and blows upon the head, succeed them. I have known dementia occasioned by dwelling in a house recently built, in the case of a rheumatic person; by lotions of cold water upon the head, in the case of a man who perspired copiously and habitually from this part; by the suppression of an abscess, following variola; the checking of a coryza; by the retrocession of gout, and the repercussion of herpes. Epilepsy often causes dementia. Thus in the hospital of the Salpêtrière, among two hundred and eighty-nine epileptics, more than thirty are in a habitual state of dementia.

Lypemania, and particularly monomania and mania, whether acute or chronic, very often degenerate into dementia. Of two hundred and thirty-five individuals in a state of dementia, I find that there are thirty-three who were maniacs or monomaniacs. Dementia is often produced by a too active and debilitating treatment, and by profuse bleedings often at the commencement of mania and monomania. It then sometimes terminates by the revival of the vital forces, which provoke an attack of mania. At the termination of a very acute mania and ataxic cerebral fevers, (phlegmasiæ of the meninges), convalescents remain in a delirium, tranquil, taciturn and sad. Their ideas are incoherent, and without strength or energy. This state constitutes the transition from mania, or a cerebral phlegmasia, to convalescence; and must not be confounded with dementia, properly so called. In a malady which is often the termination of a great many others, which is, so to speak, the constitutional condition of old age, it is not easy to determine the temperament of those who are affected by it. However, we are confident that the lymphatic temperament, the hemorrhoidal and apoplectic constitution, predispose to dementia. Those persons who have fallen into a constitutional feebleness, either in consequence of excessive study, or from errors of regimen, or from passions too long excited; those who possess a bashful, irresolute and timid disposition, and have long acted under constraint; and those whose intellectual faculties have never reached that degree of energy and activity which could alone place them in perfect harmony with those who would otherwise have been equals; are in a situation favorable for the development of dementia.

VARIETIES AND COMPLICATIONS OF DEMENTIA.

Table of Varieties.

Simple Varieties.	Number of Individuals. 1st Column.	2d Column.
Dementia acute	10	11
" chronic	43	32
" senile	35	2
" intermittent	7	2
Complicated varieties.		
Dementia monomaniacal	34	20
" maniacal	21	8
" convulsive	4	6
" epileptic,	30 out of 289 cases of epilepsy.	

A glance merely at this table, shows us that acute dementia is rare, and that continued dementia is more frequent than the intermittent form. When it is intermittent, the attack returns in spring and autumn; but after a certain number of attacks, it becomes continued. When it alternates with mania, the latter bursts forth at certain epochs; at the equinoxes and solstices. The return of the menses announces the periods of mania, and should put us on our guard against its effects.

Paralysis very often complicates dementia. Of two hundred and thirty-five cases of dementia, more than one half present certain symptoms of paralysis. A scorbutic complication, is endemic in all hospitals where the insane are received, but I have made no account of it in my reports, because this complication extends to all the varieties of insanity. This, at least, is what I have observed, in visiting both French and foreign hospitals. The complication of paralysis and scurvy, so frequent in dementia, is more rare in mania. It is as much the effect of the malady as of hygienic circumstances, which, in almost all hospitals, seem to conspire to aggravate the lot of the unfortunate insane.

MALADIES TO WHICH THOSE WHO ARE IN A STATE OF DEMENTIA SUCCUMB, AND THE RESULT OF CADAVERIC EXAMINATIONS.

The mortality is far greater in dementia than in melancholy, and especially mania; since nearly half of those in a state of dementia, die. The maladies which terminate the existence of those in dementia, are generally organic, but rarely inflammatory, unless the inflammations are of a passive character.

Table of the Principal Organic Lesions.

Cadaveric lesions.	No. of persons.
Crania with thin diploe	7
" solidified	5
" injected	3
Crania with thick diploe	12
" solidified	10
" injected	29

Crania, irregular with respect to the different diameters, and the capacity of the two halves of the osseous case	29
Meninges thickened	11
" injected	19
Basilar arteries ossified	5
Cerebrum dense	15
" softened	29
Cerebellum dense	12
" softened	17
Substance gray thickened	5
" " discolored	15
" white injected	19
Adhesion of the membrane that invests the ventricles	54
Organic lesions of the heart	5
" " " lungs	13
" " " liver	2
Biliary concretions	8
Chronic and organic lesions of the alimentary canal	24
Organic lesions of the vagina and uterus	3

At the autopsy, the cranium presents irregular dimensions, but they are not constant. Very frequently, the median line is diverted to one side or the other, so that the fossæ of the base are not equal, and the two halves of the cranium have not the same capacity. The cranium is sometimes depressed laterally, towards the fronto-parietal sutures. It is thick; now hardened like ivory, and now spungy; and injected, particularly when thick and spungy. It is thin, and even then injected. Its thickness is variable in different regions, and results from the thickening of the meninges, and not from the swelling of the convolutions. The cranium of an old person is thickest and most compact. The capacity of the frontal sinuses is increased, in consequence of the greater separation of the two frontal tables. We find also, on the external aspect of the cranium, depressions proceeding from before backward, which render salient, the longitudinal suture of the parietal bones. In this case, the depression of the external table does not bring the internal one upon the brain. This latter is, so to speak, glued to the external table, by the absorption of the diploic substance, which ordinarily separates them. The dura-mater is often adherent, either to the arch or base of the cranium, and sometimes thickened. Its internal face is covered with an effusion, which seems formed by the blood, exhaled, or poured out into the cavity of this membrane. The arachnoid is more dense, and less transparent than natural. It is infiltrated, and contains in its cavity, serous, and even sanguine effusions. At the base of the brain, we also meet with serous effusions, which are almost always found in the ventricles. Are not these the effects of the last malady, or of death? The pia-mater, thickened and infiltrated, has lost its transparency, and adheres to the cortical substance. The arteries which ramify upon the base of the brain, are cartilaginous, and even osseous, particularly in senile dementia. The caliber of the veins is augmented, and they are gorged with blood. The convolutions of the brain are atrophied, separated from one another, shallow or flattened, compressed and small, especially in the frontal region. It is not uncommon, that one or two convolutions of the convexity of the brain are depressed, atrophied, and almost destroyed, and the empty space filled with serum. The cortical substance is very red, or highly colored, and sometimes yellowish; very dense on its cranial face, and softened throughout the remainder of its thickness. It frequently adheres to the pia-mater, and is

torn when we attempt to separate this membrane from it. This is rarely wanting, when paralysis is complicated with dementia.

The white substance loses its natural hue. It is of a duller color, more dense and consistent; and we discover within it, traces of former affections; now in one hemisphere, and now in both. There are cicatrices, around which the white substance is indurated, and cysts also, containing yellowish fibrous shreds, the remains of a sanguine effusion, or surrounded and filled with serum. I have twice seen a brain which presented the aspect, and nearly the color and density of Swiss cheese, in the case of women who died paralytic and demented. We also find certain portions of the brain softened, and others hardened; and finally, traces of former hemorrhages. The adhesions of the membrane that lines the lateral ventricles, are constant. They are rare in the other ventricles, and obliterate the appendix, known by the name of the *digital cavity*. This appendix is almost always separated from the remainder of the ventricle, by adhesions, which permit, now one issue, and now two, to communicate with the ventricle at the posterior extremity. This membrane often adheres to the portion which covers the striated body. These adhesions which are more or less extended, cause the ventricles to lose their true character. They are observed, finally, in a great number of subjects who are not insane; and establish the identity of this with the serous membrane of the other splanchnic cavities. Do not these explain the cause of chronic cephalalgia, just as adhesions of the pleuræ, explain those thoracic pains, which are regarded as rheumatic? The choroid plexuses, now injected, and now discolored, usually present serous cysts; in number and volume however, very variable. In one instance, these cysts contain a serous substance; in another, an osseous. I have twice found in each ventricle, a hydatid as large as a small hen's egg. The pineal gland among the insensate, as well as other insane persons, and those afflicted with some other malady, usually presents some points of ossification, (Scarpa.) I once found it as small as the head of a pin, and at another, it seemed to be entirely wanting.

The post-mortem examinations of those who have died in a state of dementia, often disclose a tuberculous state of the lungs. Hypertrophy of the ventricles of the heart, and ossifications of the aorta, are not rare. The attention of certain German authors, who have very recently written on mental diseases, has been fixed upon lesions of the heart. These alterations ought to be observed with care, and studied in connection with insanity in general; and more particularly with dementia. The numerous changes in the alimentary canal, which have been observed in dementia, are almost invariably either symptomatic or secondary, and are also essentially chronic. These general results of cadaveric examinations, made upon the persons of those who have died in a state of dementia, offer a greater number of cerebral lesions, than are found in the other varieties of insanity. We learn that in dementia, which is the termination of all intellectual and moral disorders, which results from the progress of age, and which is so often complicated with paralysis and convulsions; the cranium, the meninges and the brain, may have undergone a great number of changes, which account for the weakening of the understanding and sensibility.

To these general results, I will add certain facts, which my practice has furnished. Although they may shed no additional light upon the immediate seat of dementia and its treatment, they will be interesting at least, from the nature of the organic lesions.

R. had enjoyed during her youth, excellent health. When about thirty-seven years of age, her circumstances become reduced, and she suffers from mental depression. She marries at thirty-eight, but has no children. She meets with many mortifications and domestic trials; her husband being an intemperate man. She ceases to menstruate at the age of forty-two years.

Since that period, her health has changed. At fifty-two she suffers from a torpor or numbness of the senses; and the death of her husband leaves her in the most profound wretchedness. She suffers from lancinating pains in the left arm, her ideas are confused, her memory enfeebled, and her conversation is without coherence. She goes and comes without an object, and no longer knows what she does. At length she sinks into profound dementia. On the 15th of April, 1812, she is brought from the Hôtel Dieu, to the Salpêtrière. At the time of her admission, she is very much emaciated and paraplegiac; moving her superior extremities with much difficulty. She repeats certain words and phrases, which she understands; but appears to have no notion, either of her condition, or of the place to which she has been brought. Both night and day, she utters piercing cries, without being able to mention, or even to indicate, what can be the cause of them. She dies twelve days after her admission, April 27th, 1812, aged fifty-six years.

Post-mortem examination.—Both the meninges and the brain, appear healthy. On raising the latter, I found a spheroidal tumor of the size of a walnut, enveloped in a proper tunic, obstructing almost entirely, the occipital foramen, and fixed, by a peduncle of some lines in length, to the membrane which lines the vertebral canal. This tumor was dense and fibrous; compressing inferiorly, the cerebellum, particularly the left lobe. The rachidian prolongation was atrophied and flattened; being only four lines in breadth, and two in thickness. It surrounded the peduncle of the tumor, to penetrate the vertebral canal; and resumed its normal figure some lines below the occipital opening, though more thin than in its ordinary condition. The left lobe of the cerebellum, more compressed than the right, lodged the greater portion of the tumor. The brain appeared to me healthy. The pleuræ presented traces of recent inflammation, and old adhesions.*

Mad'e F., fifty years of age, is brought to the Salpêtrière, without any previous intimation. Her countenance is pale, her look that of astonishment, her eyes are but half opened, and her thoughts incoherent. She manifests the most perfect indifference respecting her new situation. She makes no reply to the questions that are put to her, and expresses, from time to time, her fear of falling into the water. She coughs and expectorates abundantly. This state persists for eleven months; when a diarrhœa commences, she becomes enfeebled, and no longer leaves her bed. An enormous eschar forms upon the sacrum, and she dies.

On opening the body, I found the cranium thin, particularly the frontal protuberances, which were no more than a line in thickness. The lungs were tuberculous. The mucous membrane of the transverse colon was ulcerated at some points. The left ovarium much enlarged, enclosed a cyst, with its proper membrane, which contained a soft, tenacious, yellowish substance, in the midst of which was found entangled some flaxen colored hair.† This hair seemed to be implanted in a body, of the color and consistence of suet; in the centre of which, I found an osseous point, of one or two lines in extent, and irregular in form; together with several other bony fragments, which were much smaller.

A woman forty-eight years of age, and tall, some time after the cessation of the menses, perceived a small tumor above the left ear. It provoked an inconvenient pruritus, and the patient often lacerated it by scratching. The tumor rapidly increased in size, and projected considerably; occupying the temporal region. In proportion to the growth of the tumor, did her faculties

* This case was published by M. Scipio Pinel, to whom I communicated it, for his inaugural thesis.

† Many cases of pilous ovarian cysts have been figured and described by M. Cruveilhier in his splendid work: *Pathological Anatomy of the Human Body*, folio, fig. colored.

decay; her memory becoming enfeebled, and her thoughts losing their energy. The patient becomes less impressible, and loses sleep. At a later period, she experienced difficulty in uttering articulate sounds. She replied correctly to ordinary questions; but they did not appear either to arouse her, or to give rise in her mind to new ideas. She said little, moved slowly, complained of no pain, and suffered only in moving her head. At the expiration of three months she was brought to the Salpêtrière. She was slightly emaciated, and her complexion pale. The tumor situated above the ear of the left side, extended over a portion of the temporal region, and behind the ear. It was two inches in length, from before backward, an inch and a half in breadth, and projected from the head eight lines. Pulsations, though perceptible, were very obscure. It was adherent throughout its whole extent; had no apex, but was covered with protuberances, and the skin did not appear to be changed. This tumor continued to increase in size, during her stay in the hospital. The understanding became more enfeebled; the patient comprehended nothing; spoke no more; and appeared to be deaf. Notwithstanding, she walked three days before her death. She passed two days in bed, in a comatose state, from which she could be aroused, by violently pinching the skin upon the limbs.

On opening the body, I discovered a tumor projecting within the cranium, as well as externally; and occupying the temporal region. It presented internally, all the characteristics of an erectile tumor, and was gorged with blood. It had its proper tunic, and after having destroyed a portion of the temporal, occipital and parietal bones, together with a little of the left wing of the sphenoid, it was reflected upon the dura-mater, and consequently compressed the brain laterally. The opening, formed by the destruction of the bones, was nearly circular, and two and a half inches in diameter. The dura-mater was in other respects healthy, and the brain very dense, particularly the left hemisphere, whose lateral convolutions, compressed by the tumor, were flattened and atrophied. The ventricles contained a little serum; the other organs were healthy.*

M. P., fifty years of age, born in London, very tall, of a sanguine temperament and strong constitution, had lost, to some extent, the use of his hearing. He had command of a battalion in the service of France. He was admitted at Charenton, March 3d, 1830. At the time of his admission, he said little, demanded his liberty, complained of the injustice exercised towards him, and appeared absent-minded, and indifferent to the new objects that surrounded him. Sometimes, a season of excitement unexpectedly occurred, and then the patient addressed every one; stating that he had just come in possession of more than a hundred thousand francs. His ideas were then sufficiently connected, as well as his conversation, to give to his statement the appearance of truth. Captain P. was, moreover, kind and affectionate, and his conduct considerate and proper. It was deemed advisable, to permit him to enjoy the liberty and diversions which were granted to the most rational patients. There was however, something disjointed about his acts, his memory was treacherous, and the patient often repeated the same things. His readiness in permitting himself to be controlled, was remarkable. Slight signs of paralysis were recognized, in consequence of his hesitation in pronouncing certain words. He was accustomed to eat much, and with avidity; and suffered several times from violent congestions, which were accompanied by severe convulsions, in one, or both sides of the body. In consequence of the congestions, there remained a feebleness, now in the right, and now in the left side; and at length, the patient inclined to one side. Four years subsequent-

* *This case should have been reported with that which I related in a previous part of the work.*

ly (1834), the understanding becomes enfeebled, and the incoherence of ideas more marked; the patient is more violent, is silly, and weeps without cause. His pronunciation is such, that it is with difficulty, that he is understood; and his gait is feeble and tottering. His toilet has become foul, and neglected, and it is no longer possible to admit the patient to the common table, in consequence of his slovenliness and gluttony. He suffers from time to time, from seasons of excitement; during which he utters cries, goes and comes without motive or aim, walks, inclining much to one side, complains of those with whom he lives, and seems no longer to comprehend what he is doing.

In Nov. 1834, he refuses several times to eat, or merely eats a little broth, after having a long time declined it. He afterwards experiences very singular illusions; every thing seeming to him to be wet; both the bread which is offered him, the clothing which he wears, and the bed in which he sleeps. In conformity with this illusion, he throws away his bread, is constantly putting off his garments, nor can he be induced to remain in bed. His feebleness augments, and his physical health changes. Retention of urine supervenes, which renders it necessary to have recourse to the catheter for several days. The patient appears no longer to connect his ideas, replies to no questions that are addressed to him, and at length, on the 9th of Dec., a fever, attended with agitation and incoherent loquacity, begins. We apply leeches behind the ears, call into requisition sinapisms, and administer purgative enemata. On the following day, adynamic symptoms supervene, attended by a very abundant hæmoptysis, and he dies on the 10th Dec. 1834.

Post-mortem examination.—The bones of the cranium are thickened, and the dura-mater adheres to the cranium for a considerable extent. The cerebral surface of the arachnoid membrane is thickened, and is of a dull white, particularly on the convexity of the hemispheres. The pia-mater, slightly infiltrated, adheres to the cortical substance, which is torn when this membrane is raised. It presents, here and there, circumscribed rents, whose depth is unequal, which are red, and slightly rose-colored. The convolutions are small. The white substance is slightly rose-colored. In the anterior region of the striated body, a depression is observed. In cutting upon this point, we discover below, traces of hemorrhage, the matter of which, not being entirely absorbed, presents a rusty aspect. The ventricles contain a small quantity of serum. The cerebellum, and the annular protuberance, are more highly colored than the cerebrum. The medulla spinalis is atrophied, and has lost one fourth of its normal volume, although otherwise healthy. Both lungs are hepatized, and fluid blood flows from them. The right pleura presents certain false membranes. The heart is small, in proportion to the stature of the subject. The urinary bladder is small, its walls thickened, and its mucous membrane reddened.

M. C., thirty-seven years of age, of medium stature, and a sanguine temperament; having a large head, a well formed cranium, and well developed muscular system, after having been clerk to a wine merchant, had acquired by his excellent conduct and activity, a handsome fortune, and traded in wines. He experienced certain losses, (which however, it was easy for him to repair), as well as difficulties and domestic trials. It was observed, that he was addicted to the use of strong drink, and had become exceedingly irascible.

At length, during the spring of 1832, he was seized with maniacal delirium, attended with fury. After several bleedings, which did not compose the patient, he was brought to Paris in a state of general delirium, in which ideas relating to a fortune far greater than his own, predominated, and a slight embarrassment in pronunciation was noticed. Always in motion, he rent his clothing, walked incessantly; striking, on meeting the slightest obstacle, and at the most trifling opposition; crying, singing, distributing money, and desiring to make a fortune for every body. Insomnia was obstinate, the dejec-

tions easy, and the appetite sustained. He manifested however, a complete indifference respecting his new situation, his interests and the objects of his affection. Cups to the neck, baths, douches, affusions of cold water, and drastics, administered successively for more than fifteen months, have modified in no respect, either the susceptibility of the patient, or the incoherence and violence of his delirium, his fury or insomnia. During the summer of 1832, there appeared upon the scalp an active irritation, which led the patient to remove the hair, although very short, and to scratch the part to such a degree, as to produce sores of considerable severity. He removed also the integuments of the face, so that the inferior part of it formed a single wound, and rendered the use of the camisole necessary, to produce cicatrization. When brought to Charenton, October 2d, 1832, the patient retains his fullness of habit, and much physical strength; but, although he walks with an elastic step, we notice certain indications of a paralysis of the abdominal members. The embarrassment of the tongue is clearly marked.

During winter, the symptoms of dementia augment; he neither speaks nor makes any request. Ordinarily, when interrogated, he makes no reply; but if urged, and he replies, he contents himself with saying; *Leave me alone.* He is neglectful of his person. Whatever the hour, he is without either coat or cravat. In the spring of 1834, he suffered from several attacks of congestion, which paralyzed, but for a few hours only, one of his arms. He had, for several months, a spasmodic, and almost habitual movement of the jaws; which, rubbing one against the other, produced a sound like that of grinding the teeth. The congestions, which were often renewed, presented the following symptoms: he maintained himself with difficulty in a standing posture, nor could he serve himself longer with one of his arms, nor indeed speak. The features of the countenance were also changed. Sometimes convulsive shocks occurred in the side opposite the paralysis. Bleeding caused these symptoms to terminate in a few hours. More frequently however, he remained until the following morning, in a comatose state. The arm was then benumbed. In November, 1834, after an attack of congestion, the right arm became paralyzed, and did not again recover its power of motion. The patient lost his strength, refused to eat, and sunk into extreme mental torpor.

On the 17th of December, vomiting supervened, attended by a fever and rigors; and the patient kept his bed. He was put upon an appropriate diet, but soon deglutition became difficult, and the rigors more marked; though sensibility persisted on both sides of the body. On the 22d, there were slight contractions, followed by convulsions of little intensity in the right arm. During the day, there were rigors and vomitings. The eyelids fell, and the pupils were motionless. We apply the scarifying cups to the neck, after a general bleeding. On the 23d, same state, and a like bleeding. On the 24th, a comatose state, alternating with general and more marked convulsions of the abdominal muscles. The pupils are very much dilated, while the pulse is very much concentrated, small and frequent. Death takes place during the afternoon.

Examination.—The cranium is thick and dense. In sawing it through, the meninges of the left side were cut, from whence flowed from five to six ounces of a thick and bloody liquid. In the cavity of the arachnoid, a cyst was formed, as well as in the case following. The internal coat of the arachnoid was lined by a membrane, which extended from within half an inch of the falciform fold on the floor of the orbit and the temporal fossa, to the petrous portion of the temporal bone and ethmoidal fossæ. The interior of this membrane contained effused blood, and was of a reddish hue. There were also membraniform clots, which were adherent to it. The dura-mater of the right side had a brownish aspect like that of the left, and the cavity of the arachnoid of the same side contained a cyst, filled with a thick and sani-

ous fluid. The membrane of the cyst clothed the arachnoid to the same extent with that of the opposite side; but it was thicker, and more unequal, than the false membrane of the left side. The arachnoid itself appeared neither thicker, nor more highly colored, than in its ordinary state. The pia-mater was healthy. The two lobes of the cerebrum were so compressed, that they formed a point at their frontal extremity. The cortical substance was rose-colored at certain points, and the white substance presented no alteration. The tubercula quadrigemina were injected. The membrane of the lateral ventricles was adherent to itself at several points.

M., forty years of age, admitted at the Salpêtrière Aug. 9th, 1817, was a seamstress, and lived in the country. Her husband died in a state of senile dementia. When a girl, she was exceedingly passionate. She was tall, with black eyes, chestnut-colored hair, a fair skin, and moderately full habit of body. When seven years of age, she had variola; at eleven, psora; at thirteen, menstruated spontaneously, since which period the menses have been regular and abundant. When eighteen, she had a fever, in consequence of the kick of a horse. At twenty-four, she was married. She had no children, but became very industrious after her marriage.

In April, 1816, when thirty-nine years of age, after many domestic trials, she was reduced to poverty, and made an inordinate use of wine and brandy. Being unable to pay her rent, she was severely tried by the reproaches and threats of her landlord. The menses, which were flowing at this moment, became very abundant, and menorrhagia continued for three weeks. On its ceasing, she had a slight attack of apoplexy. Leeches were applied, she was vomited, and twice purged. The tongue however, remained embarrassed, the memory enfeebled, the ideas confused, and locomotion difficult.

Towards the close of the month of May, she was able to resume her household duties. She remained however, much excited, was always wishing to leave her house, pretending that she had business of importance. She became rapidly emaciated; and obstinately refused to cover her head, when subjected to the solar rays. On the 2d of June, she abandoned her ordinary occupations, spoke incessantly of her husband, and manifested decided mental alienation. On the 4th of June, she entered the hospital. Her step was tremulous, memory feeble, and she indulged in loud cries. On alternate days, there was a very marked remission. A vesicatory was applied to the neck a few days subsequently, peruvian bark was administered, and later still, a purgative. Her condition appeared improved, her ideas were more connected, and she walked more readily. There still however, remained some difficulty in uttering articulate sounds, and she left the hospital on the 19th of July. Having returned home, she renews her former habits, and the paralysis continues to progress until the following year. On the 9th of Aug. 1817, the paralysis was general, and the patient could not walk. It was necessary to carry her to the infirmary, and she was with difficulty able to articulate sounds. She cried much, and complained of suffering, particularly in the back. Loss of memory is now noticed, attended with dementia, and involuntary dejections. Her appetite is voracious. During the month of December, her feebleness becomes extreme, and an eschar forms on the sacrum. In January, aphonia and adynamia occur. On the 24th of the same month, she refused food, was comatose, and died at 3 o'clock, P. M., January 27th, 1818.

Autopsy on the following day, at 9 o'clock, A. M. *Exterior.*—Moderate fullness of habit, together with a superficial eschar on the sacrum. *Head.*—Cranial bone thick, and the dura-mater of a brownish color, throughout that portion corresponding with the left hemisphere. In the cavity of the arachnoid, was found a considerable effusion of a brownish sanious and flocculent liquid, exhaling a fetid odor. This fluid had flattened and compressed the left hemisphere of the cerebrum, to such a degree as to occasion the belief,

that the subjacent convolutions were effaced. The internal face of the arachnoid was lined by a brownish membrane, which formed a cyst, in which was contained the effused fluid. The membrane which formed the cyst, was flocculent on its internal surface, and extended from the left supra orbitar arch and the falciform fold, to the lateral sinus of the same side, and the whole of the left parietal bone; extending to the occipital and the tentorium cerebelli. The convolutions were very much flattened. The right hemisphere of the cerebrum had suffered no change, though there was an effusion of serum in the arachnoid membrane of this side. The vertebral canal also contained serum, and at some points, which were evidently thickened, the vertebral arachnoid adhered to the pia-mater. These two membranes were injected throughout their inferior half. The medulla spinalis appeared to be slightly softened. The uterus, voluminous and soft, presented near its neck certain small vesicles, developed in its tissue, and containing a thin colorless fluid.

What conclusion shall we draw from these, and many similar facts? That the changes observed in the brain and its membranes, are found in subjects who have given no indication of delirium; that organic lesions of the encephalon appertain to paralysis and convulsions, rather than dementia; and that the character and intensity of the delirium, are not in proportion to the extent of the organic lesion. What shall we conclude? That the examinations of the bodies of the dead, which have so often furnished important information respecting the seat of diseases, present no result which is satisfactory, respecting the source and immediate cause of the delirium of those who are in a state of dementia. Every thing indicates in this disease, a compression, sinking and collapse of the encephalon. Is this state caused by the engorgement of the vascular system, or by the lessening of the cerebral circulation? Do not the arteries, having lost their elasticity, or being ossified, propel with sufficient energy, the blood which flows languidly in veins already too greatly dilated? Does not the inflammation of the meninges, by thickening the membranes, or by provoking a too abundant serous exhalation, induce the compression? Does not the contracting of the cranial cavity, by the separation of the internal table, particularly of the coronal portion, contribute to compress the brain? The post-mortem examination of bodies teaches us little in this respect; all the organic alterations of the brain or its dependencies, appertaining less to the delirium than its complications.

I have in my possession a great number of specimens in pathological anatomy, which, compared with the history of the malady, prove that dementia existed previous to any organic lesion of the encephalon; and that when the organic lesion took place, it was revealed, either by convulsions or paralysis. What we have unfolded relative to the symptoms, causes and complications of dementia, justifies the division of this condition into three varieties; such as we have previously established, as well by their terminations as treatment.

First variety.—Acute Dementia.—This variety results from temporary errors of regimen, from a fever, hemorrhage, metastasis, the suppression of a habitual evacuation, or from the debilitating treatment of mania. Its invasion is sudden; it is exempt from any lesion of motion; and is easily cured by the combined agency of regimen and tonic treatment. Frictions, exercise on horseback, river baths, peruvian bark, musk, valerian, etc., are generally useful. It is cured by restoring suppressed evacuations, and recalling to its primitive seat the affection that has been displaced. It sometimes terminates happily by an explosion of acute mania, which is then critical, as the following case proves.

M., twenty years of age, of medium stature, having chestnut colored hair, blue eyes, a pale complexion, and a changeful physiognomy; was the offspring

of a father who suffered from a herpetic affection. She was a seamstress. When eight months old, she had convulsions, which ceased at the close of the first dentition. At ten years of age she had variola; and from this period her disposition was gloomy, and she was exceedingly susceptible, and irritable. At seventeen, the menses were with difficulty established, and were preceded by cephalalgia. They have since been regular, but scanty; and preceded on each recurrence by cephalalgia. She had a strong propensity to sleep, and fell into a slumber so soon as she ceased exercise. Although devout, she was a reader of romances. When twenty years of age, she suffered for three months with a violent pain in her head, and had during the month of July, 1819, a very serious difficulty with one of her associates. She suffered from insomnia for four days, and afterwards from delirium; wishes to die, says she is dead, and in the mean time her face becomes flushed. At intervals, she utters cries, weeps, her countenance is convulsed, and the patient assures us that she suffers dreadfully. Four days subsequently (July 22d, 1819), she is brought to the Salpêtrière in a state of mania, which persisted until the month of September. At this epoch, the patient sunk into a state of complete dementia. She appeared insensible to every thing that was passing around her, did not change her place; spoke not; and did not reply even to such questions as were addressed to her. This state continued until the month of December, when I applied the actual cautery to the neck. This application provoked a general irritation, and a maniacal delirium, which persisted for several days. In the month of January, the menses were reëstablished. The patient became convalescent, and her tastes, habit of thought, and mode of living, such as they were previous to her illness. Pinel cites in his *Treatise on Mania* the spontaneous cure of a case of dementia, by the explosion of maniacal delirium. What nature effected in the case of which this celebrated teacher speaks, did not art accomplish for the patient of whom I have just given an account?

Second variety.—Chronic Dementia.—Dementia is produced by onanism, errors of regimen, drunkenness, the abuse of pleasures, and excessive study. It is consecutive to hypochondria, lypemania, mania, epilepsy and apoplexy. This variety is very rarely cured. When it results from excesses and errors of regimen, it is slowly established. Whether it terminates monomania or mania, it appears during the existence of these last affections; and even from their commencement, there are certain symptoms which foretell this fatal termination. We most frequently notice this in monomania characterized by pride, which is ordinarily complicated with paralysis. Dementia which succeeds monomania or mania, preserves some traces of the primitive delirium. Thus, some persons have from time to time seasons of excitement, which arouse again their faculties. In other cases, amidst the incoherence of their ideas, they discover that which was prominent during the existence of monomania. The dementia which succeeds apoplexy is ordinarily incurable. That which is produced by drunkenness, presents a feature which is quite peculiar, to wit: trembling of the limbs, which has given rise to the appellation of *delirium tremens*. Its duration is short, for after some days it is spontaneously cured. To combat chronic dementia, blisters, setons, moxas, fire, irritating frictions, sea-bathing, electricity, etc., are recommended. All these measures have unhappily resulted in very rare, and often ephemeral success.

Third variety.—Senile Dementia.—Senile dementia results from the progress of age. Man, passing insensibly into the vale of years, loses his sensibility, along with the free exercise of his understanding, before reaching the extreme of decrepitude. This form of mental disease is gradually establish-

ed. It commences with a weakening of the memory, especially with respect to recent impressions. Sensations are feeble. Attention, which is at first fatiguing, at length becomes impossible. Volition is uncertain, and without impulse; and the movements are slow, or impracticable. However, senile dementia begins not unfrequently with a general excitement, which persists for an indefinite period; and is revealed, now, by the increased activity of one function, and now, by that of another. This function is exercised with a new and unusual energy, which deceives the aged subject of it, and imposes upon those around him. Thus, there are persons who, before sinking into dementia, become exceedingly susceptible, and are irritated by the most trifling matters. They are exceedingly active; desiring to understand and do, everything. Others experience venereal desires, which have long been extinct, and which urge them to acts which are contrary to their habits of continence. Others still, who are naturally temperate, experience an irregular desire for spiced and highly seasoned food; for wine and liquors. To this inordinate excitement, dementia is not slow to succeed. These symptoms of general excitement indeed, are the first indications of senile dementia. The transition from excitement to dementia is sudden, especially when the aged are opposed in their unreasonable desires, or placed where it is impossible to gratify them. We shall not confound this excitement with the mania which bursts forth at a very advanced age, in strong, robust, and well sustained persons. Mania, attended even with fury, bursts forth after the age of eighty; and is sometimes cured. The study of illustrative cases ought to suffice, to render our diagnosis sure. Country air, moderate exercise, and a tonic regimen, may retard the progress of senile dementia, and suspend, to some extent, its termination.

Complicated varieties.—It will be proper to annex to the three preceding varieties, that of complicated dementia. It exists in connection with lypemania, mania, epilepsy, convulsions, scurvy, and especially paralysis. Complicated dementia is incurable. Hippocrates has set down as a mortal symptom in acute maladies, the complication of delirium with any variety of convulsions. What the father of medicine has said respecting acute diseases, is applicable to insanity, and particularly to dementia. The complication of mental diseases with lesions of motion, resists every curative measure, and leaves no hope of a protracted existence.

The facts which I have just related, those which may be read in the works of MM. Calmeil,* Bayle† and Guislain,‡ but too fully confirm this sad truth. In 1805, I first called attention to this phenomenon, and established by proof, the incurability of insanity complicated with paralysis.|| This form of paralysis is often the sign of chronic inflammation of the meninges, and should not be confounded with paralysis which is consecutive to cerebral hemorrhages, cancers, tubercles, and softenings of the brain. It appears, now, with the first symptoms of delirium, during the period of acuity, so remarkable at the commencement of almost all forms of insanity; now, it precedes the delirium; and now, joins itself in some sort to it. Finally, whatever may be the epoch at which paralysis appears, its invasion sometimes takes place without grave phenomena; and sometimes, it is the result of congestions, cerebral

* Paralysis considered with reference to the Insane, Paris, 1826, in 8vo.

† A Treatise on Diseases of the Brain and its Membranes, Paris, 1826, in 8vo.

‡ A Treatise on Diseases of the Brain; or a new Doctrine respecting Mental Diseases, Brussels, 1833, in 8vo.

|| The Passions, considered as the Causes, Symptoms and Curative Means of Mental Alienation, Paris, 1805, in 4to.

fevers, epileptiform convulsions, etc. At first, it is partial; it then invades a greater number of muscles, and becomes general. Its progress is regular; it goes on constantly increasing, while the understanding grows weak. Whatever may be the character of the delirium, it indicates a speedy transition from insanity to chronic dementia. It is rare that insane paralytics live more than from one to three years; and among them, the strongest and most robust die most suddenly. Generally, the last moments of life with these patients are marked by convulsions, cerebral congestions, visceral phlegmasiæ, and gangrene, which embraces all that portion of the body which is deprived of the power of motion, and upon which its weight reposes.

Permit me to relate certain cases, which will render more intelligible the progress of this fatal complication. How deplorable the spectacle presented by this young monomaniac, who, strong, robust, full of life, and destined to a brilliant future, at the age of thirty years, in consequence of some trifling discussions respecting matters which were to him of some interest, persuades himself that he is the possessor of an immense fortune, which he inconsiderately spends, and believes to be an object of desire with all. He purchases, unnecessarily, and without reason, every thing that offers; furniture, horses, carriages, pictures, etc. etc., and yields himself at the same time to all the excesses of the most fashionable life. The counsels of his relatives and friends fail to bring him back to the path of moderation in his thoughts, desires, or conduct; which a little before they admired. Becoming excessively susceptible, he is irritated, and thrown into a transport of passion by the slightest observation. He refuses all medicine; assuring those around him that he was never so well or so happy. He was brought to Paris by Doct. K., a physician equally skillful and estimable. "I commit to your care," says my confrère, "a very interesting patient, who is but slightly excited, and whom I have withdrawn from scenes calculated to augment this excitement, which you will speedily cure." I converse with the patient, who speaks to me of his fortune, of his projects of happiness for himself and his friends, of the numerous acquisitions which he is to make in Paris, etc. etc. After half an hour's conversation, "what think you?" says my learned friend. "I think that your patient is incurable; that he will not recover, nor survive a year. Remain in Paris, and you will see, as the malady is making rapid progress." In conversing with the patient, I had remarked some hesitation in the pronunciation of certain words, and the undue readiness with which he had consented to remain in a private hospital. More extensive observation enabled me to obtain a glimpse of certain slight defects of memory, and a forgetfulness of the projects of the evening previous. I was struck by the indifference and the air of contentment which the patient manifested, though deprived of his liberty, and incapable of gratifying his caprices. He deferred daily until the morrow, the accomplishment of projects, which at first he wished to execute instantly. At the expiration of fifteen days the embarrassment of the tongue had increased; loss of memory is more frequently made manifest; and before the close of the month, his step is less easy, and he grows lean, although eating largely. Leeches are repeatedly employed; a seton is inserted in the neck, and valerian is prescribed as well as laxatives, to prevent constipation. Nothing succeeded in staying the progress of the inflammation of the meninges, and consequently that of the paralysis. At the expiration of three months his ideas were almost extinct; he no longer remembered any thing; and merely uttered words without any connection; repeating often, *million*, *horses*, *château*, *carriage*, etc. etc. He conducts like a child; totters in his gait; and sometimes discharges his urine involuntarily. By slow degrees, he becomes more feeble; no longer speaks but in a low voice; and never leaves his arm chair, unless he is induced to walk, and sustained beneath both arms. His appetite is at all times voracious.

At the fifth month, the patient scarcely articulates, and can no longer be understood. The dejections are involuntary, although the matters are solid, and the urine is discharged unconsciously, both day and night. Finally, at the commencement of the sixth month, he confined himself to bed; suffered for two days from epileptiform convulsions, and at the expiration of seven months sunk under a disease, which, at its commencement, appeared so trifling that the experience of a distinguished physician failed to detect it.

M. C., an advocate, thirty-five years of age, has a paternal uncle who is insane. He is tall, has chestnut-colored hair, and in his youth was very irregular in his habits. Married at twenty-three, he learned how to ally pleasures with study, and the labors of the closet. He was greatly esteemed by the circle in which he moved. In the month of April, 1836, he publicly made remarks, which led to his arrest. He was sentenced to fifteen days imprisonment, and interdicted, temporarily, his professional labors. While his case was on trial, he suffered from cerebral congestion, and was bled. After sentence was pronounced, he manifested a child-like gayety, and jested respecting this event and its consequences. From henceforth, he entertained certain notions of grandeur, and in the month of Aug., while pleading, stopped suddenly, and excused himself, on the ground that he could speak no more. From that day he hesitated in speech, and his ideas were incoherent. He was bled, and taken to a private hospital, from which, at the expiration of two months, he was transferred to Charenton, Oct. 17th, 1836. At the time of his arrival, he was emaciated, his complexion pale, the embarrassment in his pronunciation very marked, his memory very much enfeebled, and his thoughts incoherent. The patient speaks of his talents, which are the admiration of all; of his fortune, which is immense; and of his advancement, for which he is to be presented to the king; his carriages also await him. He desires to leave the house, in order to make a plea; being charged with the defence of all his fellow-citizens. He is happy, and boasts of his good fortune. He walks much, and moves like one who is seeking something; talking incessantly, in disdainful, but not threatening language. If he insists upon leaving the house, it is because he is charged with a great amount of business; or because some one is awaiting him. If he meets with a direct refusal, he is grieved, but immediately composes himself; not having moral force enough to insist. He weeps, but never manifests attachment or regrets, either with respect to his family or friends.

At each visit, his incoherent discourse is the same; his demands the same, and the feebleness of volition the same. Does he call for any thing, it is sufficient to promise him that before the close of the day, or on the day following, he shall have what he desires, and that he can, meanwhile, go wherever he may choose. Much engaged with his food, he is made very contented by the promise that his desires on this point shall be regarded. By degrees, yet with frightful rapidity, the patient ceases to speak of his profession, and dementia and paralysis progress. His pronunciation becomes more difficult, his step more tottering, and in the month of February, 1837, all the symptoms are aggravated. His toilet, which was so complete, is neglected; his garments are torn and soiled; and the urine passes involuntarily. Towards the close of winter, the patient seems to have merely fleeting thoughts. He is deprived of moral sentiment, has no memory, lays no plans for the future, and lives a merely physical existence. A few months were sufficient to bring M. C. to this last degree of intellectual and moral existence. The whole constitution gives way; the organs perish; and this man, so young, and recently so brilliant, and so distinguished for his intelligence, is now a mere automaton.

M. L. D., thirty-eight years of age, had participated in the last campaigns of the empire, and was elevated to the rank of Colonel, after the restoration;

uniting to every physical and intellectual quality all the advantages of a lofty position in society, and a large fortune. He was of the opinion that he had experienced injustice on the part of the government. His self-love was deeply wounded, and after many days of insomnia, he gave himself several thrusts with a knife, in the region of the heart. He was promptly succored, and his services were, but for a brief period, discontinued. From this time, he expressed with bitterness his dissatisfaction; but was in no respect less exact in fulfilling his duties as a commanding officer. Two years subsequently, he has an attack of cerebral congestion, for which he is largely bled. Two days later, he has a second attack, more severe than the first. He remains excited, talks much, is agitated, irritable and exacting. He does not sleep, and after a third attack, a true mania is developed. The delirium is general, attended with agitation and notions of grandeur and fortune. He commits a thousand extravagances; remains almost naked; talks incessantly; cries aloud; orders a thousand things at once; is impatient; rends; and commits strange and imprudent acts, which compromise his life, though he entertains no idea of suicide. Several physicians are called in consultation; and the maniacal state of the patient cannot be denied. His age, however, and the brief duration of the disease, offer to the counsellors expectations of a cure. I affirm that the patient will never recover: 1st, because three severe attacks of cerebral congestion had preceded the maniacal state, and that consequently there was some degree of cerebral lesion; 2d, because, notwithstanding his incessant loquacity, certain words are imperfectly pronounced; and because his gait, although lively and active, is uncertain. I added, that active medication would hasten the progress of the disease; that the country, exercise, a severe regimen, and the repeated application of leeches, to prevent new congestions, appeared to me to be the only proper course. One of the consulting physicians did not concur with me in my unfavorable prognosis, and proposed certain tentative measures. After a month spent in fruitless attempts, we were obliged to renounce all hope of cure. Paralysis had progressed, and dementia was confirmed; the patient retaining incoherent notions of grandeur, which persisted for more than two years. He regarded himself as the possessor of several provinces and kingdoms; distributed places, and gave away millions; and commanded, also, an army of giants. His cavalry was mounted upon horses of gigantic size; he possessed palaces of diamond; and his stature was 20, 30, and 40 cubits in height. He talked, both night and day; now, in a low tone; now, loudly. He also uttered loud cries. Beset by hallucinations of hearing, he listened to the voices of imaginary beings, and replied to them; boasting of his person, disputing with, and even abusing them. He recognized the members of his family, and addressed them with amiability and politeness; but after a brief interval however, resumed his habit of constant conversation. He was sent into the country. Although in a state of complete dementia, frequently experiencing vertigoes, and epileptiform convulsions; although he walked with difficulty; sometimes inclining very much toward one side, and scarcely able to articulate a word; he lived for twelve years; at the close of which period, there still remained some traces of his former politeness, together with those amiable and affectionate manners, for which he was distinguished before his illness. This patient owed his prolonged existence to the severe regimen to which he was subjected; to abundant daily exercise; to the repeated application of leeches to the anus; and the frequent employment of gentle laxatives.

Paralysis is more frequent among insane men than women. Eighteen years ago, when charged with the service of the division of the insane at the Bicêtre, during the absence of M. Pariset, who was sent to Cadiz to study the yellow fever which was prevailing there; I was struck, in comparing the number of men,

insane and paralytic, at the Bicêtre, and the number of paralytic women at the Salpêtrière. The same observation may be made in every establishment into which both sexes are admitted. It has not escaped the notice of Doct. Foville, physician-in-chief, at St. Yon, Rouen. According to this physician, they amount to one eleventh at the Institution over which he presides. Among 334 insane persons who were examined by him, 31 were paralytic, to wit: 22 men and 9 women.* At Charenton, the proportion of paralytics is still more considerable. They constitute one sixth of the whole number of admissions. In truth, of 619 insane persons who were admitted during the three years 1826, 1827 and 1828, 109 were paralytics. But the proportion of men is enormous, compared with that of women. Of 366 insane men admitted into the house, 95 were paralytics; while of 153 women, 14 only were affected with paralysis. This complication is most frequently observed among that class of insane persons who have yielded to venereal excesses, or have been addicted to the use of alcoholic drinks; among those also, who have made an inordinate use of mercury, as well as those who, exercising the brain too vigorously, in mental strife, have, at the same time, abandoned themselves to errors of regimen.

Do not these circumstances explain sufficiently well, how it happens that there are more men insane and paralytic than women? They also account for the fact, that in proportion to the number of insane men, there are more paralytics at Charenton than at the Bicêtre. The insane who are admitted at the latter hospital are poor. They lead a very laborious life, and react more energetically against the causes which we have just pointed out, as capable of producing paralysis. These causes exercise the less influence, because the laborer, engaged in manual occupations, exercises his understanding but little; thereby fatiguing, to a trifling extent only, the brain. The insane who are admitted into the establishment at Charenton, enjoy an honorable ease, are furnished with more means for the gratification of their passions, and exercise professions which excite the brain. Their material life is less active, and consequently the same causes ought to produce cerebral disturbances more frequently, and those of a graver character. It is true, that there are more insane persons who are paralytic, among the wealthy and elevated, than the other classes of society. The paralysis, which is now under consideration, is more rare in the south than in the north of France. It is still less frequent in Italy, and warm climates. Doct. Delaye has met with it at the hospital of Toulouse, but in five instances among one hundred and eleven insane persons; three men and two women. Doct. Rech assures me that he met with no paralytics, among one hundred and thirty-two insane persons residing in, or admitted, from 1822 to 1825, into the ward for the insane, in the general hospital at Montpellier.† Professor Vulpes, physician-in-chief des maisons d'Aversa, in the kingdom of Naples, stated to me repeatedly, during his residence in Paris, in 1827, that he could scarcely mention three paralytics among five hundred insane persons of both sexes, who were confined and treated in the three buildings, of which the establisment of Aversa is composed, and of which he has the charge. Whilst residing in Italy, in 1834, I established the fact that there were not only a small number of insane paralytics in the establishment at Aversa; but in all those of a similar character in southern Italy, and the Lombard-Venetian territory.

Doct. Burrows, whilst admitting that in English establishments they take no account, either of the complications of insanity, or of those maladies which terminate the existence of the insane; believes that the number of insane para-

* *Dictionary of Practical Medicine and Surgery*, art. Mental Alienation, t. i. p. 504.
† *Medical Ephemeris of Montpellier*, 1827.

lytics is less in England than in France. He adds, that in his private practice, he did not see a paralytic among twenty insane persons. This estimable author attributes the frequency of paralysis among us, to a bad regimen, and to a want of precautions suited to secure the insane from atmospheric changes, whilst in England, this class is very well cared for. In Germany they censure our mode of treatment. Certain French physicians have published the opinion, that this complication was provoked by some defect of locality, or by errors of hygiene.

I am well aware of the importance which we should attach to hygienic causes in the production of diseases. I know well that the insane are more exposed than individuals in the enjoyment of good health, to sink under the depressing influence of insalubrious localities. But I will remark, that in treating of the paralysis of the insane, I speak of that which is developed before their admission into localities devoted to this class of patients; and also, that the insane and paralytic women, whom I observed at the Salpêtrière; the insane and paralytic men, at the Bicêtre; and those of both sexes suffering from the same complication at Charenton; none of them sunk into this state during their stay at those establishments, but were paralytic before their admission. I am convinced, that when they have learned better to distinguish the symptoms of paralysis which complicates insanity; they will find in England, and particularly at London, as many insane paralytics as at Paris. Doctor Burrows seems to think that I regard paralysis of the insane as the effect and not the cause of insanity.* I have said nothing like this. I am satisfied to signalize paralysis as a frequent *complication* of insanity, and as rendering our prognosis less favorable. I believe, that in this double aspect, the duration calls for all the attention of practitioners and physicians, whose researches in pathological anatomy relate to mental diseases. M. A. L. Bayle† desires to prove, that the paralysis and monomania of the rich and great are the signs of chronic meningitis; and that this inflammation presents three well marked periods: 1st, the period of ambitious monomania, with certain traces of complete paralysis; 2d, the period of mania; 3d, the period of dementia with general paralysis.

Great as has been the number of the insane which I have seen, the monomania of the great has not presented to me a march so regular; I have seen it preceded by attacks of mania, by monomania and lypemania. Paralysis complicates all forms of insanity, whatever may be the character of the delirium. It complicates mania and lypemania, as well as ambitious monomania, but more frequently the latter. It almost invariably complicates dementia. If in observing mania at its commencement, we discover symptoms, however trifling, of paralysis; we may boldly affirm that dementia will succeed the former. It is equally true with monomania, whatever may be the character of the delirium; and we may add moreover, that death will, at no distant day, terminate the disease. Neither maniacs nor monomaniacs possess, in these cases, the same energy of attention, the same vigor in the association of ideas, the same strength of will, the same tenacity of purpose, the same obstinacy in resistance, as formerly. They are agitated and transported by passion, but obey and yield; indicating by their acts a weakened state of the brain. It has happened to me to express an assurance, that a furious maniac was already paralytic, and could not recover, notwithstanding the opinion of several physicians to the contrary, who were worthy the highest esteem; but who, having less experience with the insane, had overlooked the symptoms of paralysis, which were in truth, very marked.

* Communications on the causes, forms, symptoms and treatment, moral and medical, of Insanity. London, 1828, in 8vo.

† A treatise on diseases of the brain and its membranes, Paris, 1826, in 8vo.

Called to take charge of an officer, who was suffering from ambitious monomania attended with fury, although the patient was in other respects strong and robust, I declared that he would not recover; and that soon, they would clearly perceive the existence of paralysis. My prognosis was founded on the two following phenomena: 1st, in the middle of a sentence, the patient articulated certain words more slowly than others; 2d, it was sufficient to make him a promise, to compose him, and cause him to renounce those projects to which he was strongly inclined. A slight strabismus enabled me to form a similar conclusion respecting a monomaniac who was, at the time, fulfilling the duties of captain of a regiment.

If the diagnostic signs of chronic meningitis, were monomania, resulting from exaggerated notions of greatness, attended by paralysis; this form of monomania would never occur without paralysis. Observation establishes the contrary. Insane women are rarely paralytic. Insane men and women, in warm climates, in the south of France and Italy, are rarely paralytic. However, ambitious monomania bursts forth at Paris, among insane women; nor is it unfrequent in the south of France, and in Italy, among the insane of both sexes. Monomania, attended by pride, exists therefore, without paralysis; and on the other hand, paralysis exists without delirium. How then can we admit that this form of monomania and paralysis, are pathognomonic signs of chronic meningitis? There are cases of paralysis, attended by exclusive delirium, and by the monomania of pride and ambition, in which the delirium ceases, and the paralysis persists. I observed, near the close of the year 1827, a fact of this kind.

An officer, connected with a company of horse belonging to the king's household, is suddenly seized with an attack of monomania; the patient believing that he is a distinguished personage, and exceedingly wealthy. He commits numerous extravagances, and at the same time, experiences difficulty in uttering articulate sounds. At the expiration of five weeks the monomania ceases, but the paralysis persists, and soon invades the muscles of the limbs; the patient suffering from frequent cerebral congestions, which provoke epileptiform convulsions, though delirium no longer exists. This soldier distinguishes clearly between the state in which he now is, and that in which he has been; demanding for the former, the aids of medicine.

When we examine the bodies of the paralytic insane, and even monomaniacs, we do not always meet with indications of inflammation of the meninges; whilst on the contrary, we sometimes meet with inflammations of the meninges, though there has been no delirium connected with notions of greatness.

Doctor Calmeil,* who has derived his information from the same sources with M. Bayle, that is to say; from observations collected at Charenton; has manifested a marked reserve with respect to his conclusion from the facts which he has reported in his work, which is in all respects so remarkable. Our learned confrère, and my collaborator in the duties which I was appointed to discharge towards the insane at Charenton, was satisfied to establish by numerous facts, that chronic inflammation of the meninges, produced *general paralysis*, peculiar to the insane; but was never of the opinion that he had discovered the immediate cause of that form of delirium which was ever connected with ideas of grandeur and wealth. Paralysis of the organs of speech, depends upon a lesion of the anterior lobules of the brain, says M. Bouillaud.† It is one of the most incontestable of facts, adds this skillful professor; nevertheless, observation does not always justify this proposition. Nature perseveres

* Paralysis, considered with reference to the Insane. Paris, 1826, in 8vo.

† A Clinical and Physiological Treatise on Encephalitis, or Inflammation of the Brain. Paris, 1825, in 8vo.

in maintaining her secret, notwithstanding the constant researches of physicians, in all ages.

I will close my remarks on the paralysis of the insane, with a few practical considerations. The paralytic insane eat gluttonously, and collect their food in the back of the mouth, in some instances, to such a degree as to prevent swallowing. This accident also happens when the paralysis, having reached the muscles of deglutition, renders the performance of this function almost impossible. Then the solid aliment, being no longer propelled into the stomach, is retained in the œsophagus, and compresses the larynx. In these cases, asphyxia is imminent; and the person who, a moment ago, was dying, is restored again to life, by relieving the throat and mouth of those substances which have not been conveyed into the stomach by deglutition. I once witnessed a very singular case, which eventually proved fatal to the patient, who is the subject of the following observation.

M., about forty years of age, after a long attack of mania, had fallen into a state of dementia. The desire for food was so strong, and the taste so perverted, that the patient was accustomed to devour the most disgusting substances, and ate all the insects he could catch during his walks in a very large garden; such as spiders, snails, worms, butterflies, etc. He was one day served at dinner with a portion of a calf's head. He ate the whole of it with avidity, and soon after fell prostrate, in a state of unconsciousness. His face was of a purple color. His attendant, suspecting the cause of this accident, introduced a foreign body into the œsophagus, and propelled the food into the stomach. Some weeks subsequently, calf's head was again served to the same patient; but in this instance, fearing his gluttony, they took care to cut into morsels the food which was presented to him. Scarcely had he introduced a little into the œsophagus, than the accident referred to above, was renewed. The use of this variety of meat was strictly forbidden. Six months afterwards, either through forgetfulness or ignorance, they again served the calf's head to this patient. In this instance, he had swallowed too large a morsel, from which it was impossible to relieve the œsophagus, and he speedily died. On opening the body, the œsophagus was found greatly distended with a morsel of the meat, which he had attempted to swallow. The brain was very red, the meninges thickened and injected, and the lungs engorged with blood.

Constipation is also a frequent symptom among insane paralytics. The rectum being paralyzed, defecation is almost impossible. Here, fecal matters remain for a longer or shorter period; sometimes even for twenty or thirty days, before the patient begins to complain. If not carefully attended to, by those whose duty it is to serve them, and this inconvenience obviated, the intestines become inflamed, and at length, gangrenous. Purgatives produce no effect, frictions upon the abdomen succeed no better, and the patients die. Sometimes the accumulation is so great, and so hardened, that mechanical means are necessary to unload the rectum. The retention of urine, also demands special attention. It is sometimes necessary to have recourse to the catheter; but more frequently, insane paralytics are subject to incontinence of urine, or else it is discharged by overflowing. During the day, they soil their clothing, and at night inundate the bed, if, in consequence of their feebleness, they are permitted to remain there. The urine is not slow in forming eschars, which destroy the integuments down to the bone. These patients ought to be lodged upon a bed of a peculiar construction, their linen frequently changed, and washed with an infusion strongly aromatic, or even with alcohol diffused in water. Insane paralytics are also exposed, in consequence of their extreme feebleness, to a grave accident which compromises their existence. If precautions are not taken, on sitting down before a fire, they will permit them-

selves to be burned, without making any complaint, so severely as to endanger life. If, while in bed, they attempt to change their position, having no longer sufficient strength to control the impulse which they give their bodies; or in consequence of not possessing sufficient understanding to measure distances; they permit themselves to fall, ordinarily upon their head, and die a few days afterwards. I have several times shown, that the ecchymosis of the dura-mater, being propagated to the subjacent portion of the arachnoid; or else a circumscribed sanguine effusion, membraniform, and extended over the external lamina of the arachnoid, was the first result of the fall of these patients from the height of their heads; a result which hastened their death. It happens but too frequently, that we confine either to a bed or quieting chair, the furiously insane, and insane paralytics; the former, to prevent their yielding to the impulses of their fury; the latter, to avoid the falls to which they are liable while walking. We should fear abusing a measure of this nature, since the want of motion and exercise favors the progress of paralysis; and since it is often induced among furious maniacs, in consequence of the prolonged repose to which they are forcibly subjected. It is the dread of this result, which has led to the introduction, in the insane establishments of Spain, of a long chain, fastened to the bed, and attached to one of the feet. They thus protect themselves against the fury of maniacs; allowing, at the same time to the latter, perfect freedom of motion.

[A class of cases terminating in the disease under consideration,—and which may be found in the latter part of this chapter,—may appear peculiar, and perhaps quite new to some of the readers of this work. It forms a variety, which, if it has existed, has been little noticed so far as I can learn, by writers on insanity in this country. The only source from which I have been able to obtain information on this interesting form of disease,—not having had an opportunity to witness a case of it,—has been the last Annual Report of Doct. Bell, Superintendent of the McLean Asylum, Charlestown, Mass. I take the liberty to transcribe what he says in reference to it, and also Doct. Conolly's description of it, which is found in the same Report. "I have regarded it (says Doct. B.), as a somewhat curious fact, that it is only within the last three years that this disease has been admitted to this institution. As late as my visit to Europe in 1840, it was unknown within our walls. Nor after seeing it so often manifested there, can I recall any case in our register, which would at all meet its characteristics, rendering it certain that it was not overlooked. Since that period, however, we have had abundant evidence that it is not a form of disease peculiar to other countries. I find that not less than twelve or fifteen well marked cases have been received, coinciding exactly in mental and physical manifestations with those I saw, and which are so graphically described by many English and continental authors." Dr. C.'s description comprises the essential characteristics of general paralysis, and is as follows: "Men in the prime of life, intelligent and of active habits, have perhaps sustained a single attack of paralysis; a slight impairment of the mind, a slight faltering in the speech, and a little infirmity in the gait, only discovered by those who look for it, are the most prominent symptoms. Yet in all these cases the death-blow is struck from the first. When the previous history of those cases can be obtained, it is usually found that certain changes of character and disposition preceded the paralytic attack. The individual who was before prudent in his conduct, has become extravagant and speculative; or after being lively and attentive to propriety of dress and behavior, has become dull, slovenly, and occasionally forgetful of decorum. These changes have gradually appeared for a year or two, before disease has declared itself. After a little ebullition of discontent on being removed from their homes, they often become contented and full of exciting hopes. Sometimes they are fretful, because they cannot carry into effect some project or speculation connected with

their former pursuits. But a vague kind of happiness soon succeeds to this state. Their health, they say, was never so good, their mind never so clear, their prosperity never so secure. Fits of a convulsive character, sometimes decidedly epileptic, often supervene on this state; and each attack leaves the mind and body weaker, until a paroxysm more severe than common, proves fatal. When this is not the course of the disease, the mental excitement becomes more extreme, and after some continuance, ends in an obliteration of almost every faculty, in which state the patients' life may be prolonged for a considerable period." Thus far Doct. Conolly. Doct. Bell in conclusion says: "The cases under my care have uniformly, with a single exception, been of the male sex, and in almost every instance in those, who have borne the long continued pressure of unusual business anxieties, either with or without reverses. The form of delusions has almost always borne reference to immense amounts of money, great power or some similar exaltation. No recovery has occurred among them."

IDIOCY.

Brief account of the views of authors in regard to idiocy.—Synonyms.—Origin and signification of term.—Commences with life.—Idiots never reach an advanced age.—Vices of conformation almost invariably discoverable in brain.—Dementia and idiocy contrasted.—Illustrative cases.—Idiots classed in two divisions, viz., imbeciles and idiots.—Contrasted.—First variety.—Imbecility.—General description of imbeciles.—Cases, together with admeasurements of the head.—Remarks respecting habits and mode of life of imbeciles.—A few whose minds are capable of partial development.—Their gayety, piquant repartees, jovial manners, etc., have been the means of their introduction to the great.—At Court even is there the post of *fool*.—Origin of custom.—Employed by rogues for culpable purposes.—Acts to which puberty gives rise.—Second variety.—Idiocy.—Idiots incapable of speech.—Case of Quéneau, with post-mortem examination.—Other cases, describing the figure, admeasurements of the head, habits, and peculiar characteristics of idiots.—Moral and physical condition of the mothers of idiots, while pregnant with them.—Account of cases representing the extreme limit of idiocy from Pinel, Gall, and the records of the Salpêtrière.—Idiots nearly or quite deaf as well as mutes.—The senses null or exceedingly obtuse.—Comparative view of the condition of the blind and dumb, and idiots.—Remarkable aptitude of many idiots for the acquisition of music, and their fondness for musical sounds.—Deductions from the above cases.—A number of the physical and predisposing causes noticed.—Exciting causes of idiocy.—Volume and form of the heads of idiots.—Gall's limits of intelligence.—Researches of Foville, Parchappe and others, respecting the vices of conformation in the cranium of the idiot, and its development compared with that of the healthy subject.—*Table of mean results of certain cranial admeasurements*.—Remarks of Morgagni and Meckel respecting the cerebral substance in idiocy.—Malacarne, on the convolusions, etc., of the brain in idiocy.—Remarks of Lavater and Camper respecting physiognomy of idiots.—Remarks on treatment.—(Brief account of some *recent* attempts to improve the condition of idiots).—Cretins, Cagots and Albinos.—Cretinism.—Origin and definition of term.—History of Cretinism.—The person of the cretin described.—Like idiots, cretins may be divided into three classes.—Description of first class.—The first, the most numerous class.—Description of second class.—Of third class.—Cretins not necessarily born such.—Organism develops very slowly.—Relative proportion of cretins and idiots.—Examination of the crania of idiots obtained with great difficulty.—(Description of one belonging to Dr. H. A.

Grant, of Hartford, Conn.)—Opinions of authors respecting the causes of cretinism various.—Views of several authors noticed.—Opinion of M. Bayle in respect to the influence of water in the production of cretinism.—Opinion of M. Vyn.—Immediate cause as obscure as the predisposing and remote.—Opinions of authors respecting.—Probable cause, the influence to which infants are subjected.—Do cretinism and goitre depend upon the same cause?—Cretinism diminishing.—Causes assigned.—Albinos.—Definition of term, and description of the person of albinos.—Usually found in connection with the goitrous and idiotic.—Born of parents of every variety of complexion.—Intellectual and physical characteristics.—Natives of all countries.—Synonyms.—Testimony of ancients respecting albinos.—Characteristics, physical and intellectual, of the parents of albinos.—History of Roche.—Cagots.—Signification of term.—Provincial appellations of.—Degradation of those wretched beings for centuries, extreme.—Considerations with respect to savage races of men.—Conclusion.—Cases in illustration of the history of idiocy, giving an account of the mental and physical condition of idiots, together with a description of their physiognomy, and daily habits.—Several autopsies.

Much confusion pervades the writings of all those authors, who have treated the subject of mental alienation, relative to idiocy, (idiotism). Confining themselves to appearances, they have confounded idiots with persons in a state of dementia, and reciprocally; sometimes even, with monomanics. Because the latter, absorbed by a few fixed ideas, seem to be plunged into a state of stupor, or because the understanding of others seems to be obliterated, they have concluded that all were idiots. Sauvages, Sagar, and Vogel, have denominated idiocy *amentia*, *imbecillitas*, *ingenii*, *fatuitas*, and Linnæus has called it *morosis*. Cullen and Fordéré, innate dementia. Dufour and Pinel have constituted it a variety of insanity, which they designate by the appellation of idiotism. Notwithstanding, our celebrated Professor distinguishes idiocy from dementia, only by the degree of change in the understanding, and defines dementia, the abolition of thought; and idiocy, the obliteration of the intellectual and affective faculties. He often speaks of the latter, as of the most advanced degree of dementia; and relates facts, from which it appears evident that he entertained no very clear notions respecting these two infirmities of the mind. Finally, he admits an acquired, and also a connate form of idiocy. The word ἰδίος, *privatus*, *solitarius*, expresses the condition of a man, who, deprived of reason, is isolated in some sort, from the rest of creation. From the word *idiota*, *idiot*, *idiotism* has been deduced; but as the latter word has already a grammatical signification, it has seemed to me advisable, to substitute for it, the word idiocy, and devote it to the language of medicine. Idiocy is not a disease, but a condition in which the intellectual faculties are never manifested; or have never been developed sufficiently to enable the idiot to acquire such an amount of knowledge, as persons of his own age, and placed in similar circumstances with himself, are capable of receiving. Idiocy commences with life, or at that age which precedes the development of the intellectual and affective faculties; which are, from the first, what they are doomed to be, during the whole period of existence. Every thing about the idiot betrays an organization imperfect, or arrested in progress of development. We can conceive of no possibility of changing this state. Nothing teaches us how to impart, for a few moments even, to the wretched idiot, an increase of reason or intelligence. He never reaches an advanced age,—rarely surviving more than thirty years,—and on laying open the brain, we almost invariably discover vices of conformation.

Dementia and idiocy differ essentially; otherwise, the principles of every classification are illusory. Like mania and monomania, dementia only commences with puberty; and has a period of increase which is more or less

rapid. Both chronic and senile dementia, increase from year to year, by the decay of the organs, and the successive loss of some faculty. Every symptom betrays physical weakness; all the features are relaxed, and the eyes are dull, and downcast. If the demented person desires to act, it is because he is impelled by a fixed idea, which has survived the general loss of intelligence. We can cure dementia, and conceive the possibility of suspending its symptoms. There is indeed, a diminution and privation of the energy requisite for the exercise of the faculties, but those faculties exist still. Moral shocks, as well as certain medicaments may revive, and excite sufficient strength to produce the manifestation of certain ideas and affections. Other means also, may remove the obstacles which prevent this manifestation. If a person, who has fallen into a state of dementia does not die immediately, he may live a long time, and reach a very advanced age. On examining the body, we sometimes meet with organic lesions, but they are accidental; for the thickening of the bones of the cranium, and the separation of their tables, coinciding with senile dementia, do not characterize vices of conformation. It is the same with the alterations and changes, which the cerebral substance undergoes in the progress of age.

A man in a state of dementia is deprived of advantages which he formerly enjoyed; he was a rich man, who has become poor. The idiot, on the contrary, has always been in a state of want and misery. The condition of a man in a state of dementia may change; that of the idiot is ever the same. The latter retains many of the features of infancy; while the former preserves much of the physiognomy of the adult man. In the case of both, the sensations are null, or nearly so. The man who is in a state of dementia however, indicates in his organization, and even in his intelligence, something of his past perfection; while the idiot is, what he always was; and is all that he can be, so long as his organization remains unchanged.

From this comparison, have we not a right to conclude that an affection, the epoch of whose invasion is constant (infancy), which presents special symptoms, the prognosis of which is always unfavorable, and which presents organic changes which are peculiar to it, offers a collection of features, sufficient to distinguish it from every other malady?

But there are persons, who appear to be deprived of sensibility and understanding; who are destitute of ideas, words, and the power of motion; who remain where they are placed; whom it is necessary to dress, and feed with a spoon. Are not these idiots? Not necessarily. These are not the actual symptoms; and it is not one epoch only of a disease, which can furnish an abstract idea of it. On the contrary, it is necessary to study this malady during all its periods, each of them being capable of furnishing certain diagnostic indications. I once made a drawing, and gave the history of a girl, who presented all the symptoms which are ordinarily regarded as the signs of idiocy. She was terrified, and fear enchained the exercise of all her faculties.

I once had in charge a young man, twenty-seven years of age, who, deceived by a woman, and having been unable to obtain a situation which he desired, after an attack of mania, fell into a state of apparent idiocy. The face of this patient was flushed, and his eyes fixed or vague in their expression. It was necessary to dress and undress him, and to put him in bed. He ate, only when food was conveyed to his mouth. His arms hung by his side, and his hands were tumefied. Though always standing, he walked only when obliged to, and appeared to possess neither sensation nor thought. Leeches applied to the temples, tepid baths, cold douches upon the head, and particularly, a general eruption over the surface, cured him. After his cure, he informed me that an internal voice said to him: *stir, and you are lost;* fear rendered him motionless.

The sensibility and intelligence are not therefore extinct;—the manifestation of these faculties being prevented by various motives,—of which the patient gives an account when cured. Whilst giving my clinical course in 1822, we had at the Salpêtrière, a Mad'e B., who seemed to be in a profound stupor, and completely insensible. She remained motionless near her bed, and never spoke. I often pinched and pricked her, without her manifesting the least degree of pain. I ordered a seton to be inserted in the nape, and several blisters were applied on various parts of the body; the same insensibility being always manifested, the same obstinate silence, and the same unwillingness to walk. On one occasion, this girl did not appear at our visit; after which period, we were unable to persuade her to remain in the dormitory at the hour of the clinic. When cured, she informed me that a pupil had pinched her. She was offended by this impertinence, which was allowable in me, but improper on the part of the pupils; and resolved not to permit it to be again repeated. Certain monomaniacs, controlled by erotic or religious ideas, present the same symptoms. In all these cases, the sensitive and intellectual faculties are clearly and energetically exercised,—appearances deceiving us,—as there is no idiocy. From the man who enjoys the use of his sensitive and intellectual faculties, but who, in consequence of a feeble organization, is placed in the lowest rank of social and intellectual life, to that of idiocy, there are degrees innumerable. Who could point out and describe every shade in the descent, from the man who thinks to the idiot who is destitute, even of the instincts of our nature? Nevertheless, in studying facts, we may class idiots in two series, in which they may all be included. The former embraces imbeciles; the latter, idiots properly so called. In the first class, the organization is more or less perfect; the sensitive and intellectual faculties are somewhat developed; sensations, ideas and memory, as well as the affections, passions, and even inclinations exist; but only in a slight degree. They feel, think, speak, and are capable of acquiring a certain amount of education.

In the second series, the organization is incomplete; the senses are scarcely developed; and sensibility, attention and memory are nul, or nearly so. Idiots have a very small number of limited ideas, beside their passions for the supply of instinctive wants; which are expressed by certain gestures, words, monosyllables or cries. Reason does not control their actions; which are few, and repeated, either from habit or the force of imitation.

First variety.—Imbecility.—Imbeciles are generally well formed, and their organization is nearly normal. They enjoy the use of the intellectual and affective faculties, but in a less degree than the perfect man, and they can be developed only to a certain extent. Whatever education they may receive, imbeciles never reach the degree of reason, nor the extent and solidity of knowledge, to which their age, education and social relations, would otherwise enable them to attain. Placed in the same circumstances with other men, they do not make a like use of their understanding. M., thirty-seven years of age, belongs to a family, who enjoy an immense fortune. His mother, during her pregnancy with him, experienced long seasons of disquietude, and keen moral sufferings. His head presents nothing remarkable. His hair is abundant, and his eyes small and without expression. In his physiognomy, there is something vague, uncertain and sad. The organic developments took place at a later period than is usual with children. He scarcely walked at the age of four years. At five, he pronounced a few words; and at six, could talk. Incapable of attention, his petulence was extreme. It was long before he learned to read and write; nor could he ever read connectedly, nor write a letter, however short, nor remember what he read. They attempted, but in vain, to teach him one of the mechanic arts. He learned a little music, and

sang certain airs; but his stock of knowledge was exceedingly limited. He was excessively timid, and until the age of eighteen years, dared not leave, alone, the paternal mansion. After that period, he was accustomed to run about at random in the fields, to talk much, and even became a babbler; always speaking irrelevantly with respect to the subject of conversation. He frequently employed one word for another. Always cheerful, he was accustomed to laugh without a motive, and sometimes by himself. He passed a portion of the day, either sitting or lying down; and it was only by considerable effort that he set himself in motion; but once started, he knew not when to stop. He was never able to combine other ideas than those which are in constant use. He never formed a project, merely living from day to day. He was incapable of managing his business, or of directing an enterprise. At the age of thirty-seven years, his intelligence was certainly inferior to that of a child of ten years, notwithstanding the care that had been taken to develop it. At puberty, he manifested none of the passion proper to that age. He lived alone in the country, not thinking that his mode of life could be different and more agreeable. The extent of his intelligence will be understood from the following fact. His physician told him he must mount a horse. Accordingly he daily spends an hour in mounting and dismounting one of his father's horses; not suspecting that it was a ride on horse-back that had been ordered. Chance discovered this mode of obeying the doctor's command.

Whilst in charge of the ward for the insane at the Bicêtre, in 1821, a rachitic imbecile died, who was of a very diminutive stature, and whose cranium was very small and narrow; while the face was largely developed. His physiognomy was very changeful, and even intellectual. His countenance wore the expression of a cynical smile, and resembled much that of the most celebrated personage of the last century, as it respected the fecundity and cynical character of his mind. This imbecile, at the time of his death, was thirty-four years of age, and had been an inmate of the Bicêtre for quite a number of years. He spent his life in doing and saying malicious things, and in playing tricks on those about him. He yielded himself, in a horrible degree, to the practice of masturbation. On the very evening of his death, he was surprised on his bed, endeavoring to gratify this fatal inclination. He had never learned either to read or write, or any trade. He was very chatty, and his repartees were the more surprising, as he was habitually accustomed to speak incoherently, incessantly, without any connection of ideas, and always irrationally. He walked much, ate voraciously, was filthy in his habits, and careless of his clothing. A cast in plaster, of the head of this imbecile, taken after death, presented the following admeasurements.

Circumference	16.73 in.
From the root of the nose to the tuberosity of the occipital bone	12.00 "
Antero-posterior diameter	6.65 "
Bi-temporal diameter	5.14 "
Total	40.52

R. was eleven years of age at the time of her admission at the Salpêtrière, and nineteen when I committed her case to writing. Her head is remarkably regular; the forehead is high and large; the frontal protuberances are well developed; the facial line approaches ninety degrees; the hair is thick and black; the eyes large and blue; the nose slightly flattened; and the teeth handsome and regular. The cheeks are plump, the physiognomy mild, somewhat expressive, and the skin white and supple. The limbs also are well developed. Admeasurement of the head, taken while living:

Circumference	19.56 in.
From the root of the nose to the occipital protuberance	14.28 "
Antero-posterior diameter	7.12 "
Bi-temporal diameter	5.74 "
Total	46.70

R. usually sits with her knees crossed, her hands beneath her apron, and is almost constantly raising or depressing her shoulders. Her physical health is good, and she has a good appetite. She is a gourmand, worrying herself much about what she shall have to eat at her meals; and if she sees one of her companions eating, cries, and calls for something for herself. Whilst with her parents, she was accustomed to escape and run to the shop of a pastry-cook who lived near, and devour the first pie that she saw. She was also in the habit of entering a grocer's shop, seizing upon the bottles of liquor, and if they attempted to prevent her from drinking, dashed them upon the ground. Her step is slow, and if any one approaches her, she raises her head awkwardly, and turns her eyes to see who is coming.

She understands every thing that is said to her. She has a little memory, and relates certain facts which she heard while at home. She replies correctly and slowly, in a lisping and stifled tone of voice. She asks few questions; but demands her repasts, articles for the toilet, dolls, etc. She sings certain airs, is acquainted with the value of money, counts it, and preserves it to buy dainties and toys. She is cheerful when her mother pays her a visit, and is regarded by strangers as a domestic. She is fond of dolls, with which she amuses herself, but does not preserve them; leaving them wherever she happens to go. She is timorous and frightened at the least noise. She is also mild and diffident; and if dressed in a manner more than usually tidy, is delighted, and displays herself to every one. Full of vanity, she is very sensible to flattery, and smiles with complacency when her person is commended. She is cunning and conceited. On wetting her bed, as she sometimes does, she defends herself, and accuses the servant girls of it. She detests her room-mate, who is a mute, and poorly clad. She has been caught thrusting needles into a blistered surface, which had been made upon the person of her wretched companion. She knew her letters and could read a few words. On seeing one write, she takes the pen, as if desirous of making the attempt. Her mother could never learn her to sew, knit, or take charge of household matters; still less to read connectedly, or write. Though she dresses herself alone, she calls for the assistance of a servant girl to adjust her garments in a proper manner. She is fond of men, smiles in their presence, and runs after them. Notwithstanding she is nineteen years of age, she has never menstruated. Her mother, while pregnant, had been dreadfully frightened. The child was born feeble, but grew until two years of age, when an arrest took place in the development of the organs. She did not walk until four years of age; her understanding was developed at a still later period; and she did not talk until she was seven years old. With respect to her reason, this imbecile resembles a child of seven or eight years. It is probable that in a more favorable condition, she would have acquired an amount of instruction which would have permitted her, with some degree of watchfulness on the part of her friends, to live in society.

P., twenty-two years of age, was admitted at the Salpêtrière, Aug. 27th, 1812. Her mother while pregnant, experienced certain severe trials. P. had a feeble and sickly infancy, and learns to walk at a very late period. When five years of age, she suffered from a severe illness, resulting, it was supposed, from a fright. Since this period, the progress of intelligence has ceased, although the organs are well developed. Her stature is above the medium size,

her step easy, slow, and somewhat haughty; her hair of a chestnut color, and her forehead lofty. Her eyes are blue, face flushed, chin small and sharp, teeth white, and well arranged, the occipital region well developed, the physiognomy mild and friendly, skin fair, and the limbs well formed. The admeasurements of the head, taken during life, are as follows:

Circumference	33.66 in.
Antero-posterior diameter	7.87 "
Bi-temporal diameter	6.10 "
From the curve at the root of the nose, to the occipital tuberosity	14.29 "
Total	61.92 "

The menses appeared at thirteen, and were abundant and regular at fourteen years of age. After that period, her disposition became less amiable, and she refused to labor. The sight of men caused the color to mount into her cheeks, and she was accustomed to escape from the house of her parents, to run about and play with little boys. The intellectual capacity of this imbecile is considerable. She attends both to what she sees and hears. She has some memory, forms a sufficiently accurate judgment respecting the most common things, and replies correctly, but in a hesitating tone, to such questions as are addressed to her. In vain do they endeavor to teach her to read and labor. She knows a few letters, and that is all. She has learned how to arrange dolls, and amuse herself with them. She dresses herself, combs her hair, washes herself, makes her bed, and calls for a change of linen. She goes for her food, but is unwilling to receive it, except in the dishes appropriated to her use. Very haughty, she disdains her companions; and notwithstanding she is habitually mild, opposition irritates her. She is then perverse, abusive in her language, and when angry, strikes. If any one strikes her, she returns their blows with interest. She is excessively obstinate, and never yields. She has neither fear nor jealousy. She walks much, and sports with her companions. She is very fond of her mother, caresses her, and if the latter is long absent, she becomes sad. She accuses her father-in-law, whom she dislikes, of treating his other children better than herself; and particularly of supplying them with handsomer clothing. She is observant of the attentions that are paid her. The sight of men produces a strong impression, and she is on the watch for the workmen, when permitted to enter the courts of the hospital. Never has she become habituated to continued labor. Her physiognomy expresses her joy, on receiving a new dress, and she hastens to display herself to her companions and the domestics of the house. When I caused her portrait to be taken, in consequence of the regularity in the form of her head, and the harmony of the features of her countenance, which contrasted with the feebleness of her understanding, she seemed to be transported with joy. Nevertheless, I found much difficulty in inducing her to keep her seat, which she was constantly disposed to leave. I was never able to take a cast of her face; for so soon as she felt the softened plaster over her eyes, she would open them. She has often essayed in vain, to keep her eyelids closed, and often wept with mortification at her inability to submit successfully to the operation.

Imbeciles are incapable of attention; their sensations are feeble and fugacious; their memory dull and inaccurate; and their will without energy. They can combine and compare, but are unable to rise to general and abstract notions. They are not, in general, deprived of the power of speech; and if a few of them are mutes, they very readily express, by the play of their countenance and gestures, their thoughts, desires, and wants. They learn to read

and write, and also music. They exercise the mechanic arts, but perform imperfectly every thing that they attempt. They live in their respective families like strangers or great children. If not directed in what they do, in the discharge of social usages and duties, and in the administration of their affairs, they become the victims of their incapacity and improvidence. Possessing little sensibility, although irritable, they part with their relatives without regret, as well as those who take charge of them. Some, however, are very grateful, and susceptible of love or hatred; but their affections are not durable. They seek for sexual commerce, often with transports. The function of nutrition is well executed. To this extent do imbeciles possess aptitudes, inclinations and dispositions, which contrast with the feebleness of their organization, sensibility and intelligence.

Imbeciles are nothing of themselves. They produce nothing; and all their movements, both intellectual and moral, are aroused only by foreign impulses. They neither think nor act, but through others. Their will is without energy. They will and do not will. They cannot follow a conversation, still less a discussion; and know not how to conduct a project to its close. They regard as serious, things the most gay; and laugh at those that are most sad. Does something interest them; their eyes are fixed, but they do not see. They hear, but do not comprehend; although they affect to have both seen and understood. They reply correctly; but you must not ask them many questions, nor require from them responses which demand reflection, or are contrary to their habits. Usually self-satisfied, they speak of themselves in a tone indicative of such a frame of mind; or seek for expressions to which their physiognomy does not respond. Their gestures and position are odd, and rarely in harmony with what they think or say. Their management betrays them, as well as their development, which indicates a want of capacity, and a determinate end. They are deceitful, mischievous, liars, quarrelsome and irascible, but poltroons. Puffed up by pretensions; easily led and controlled; incapable of application and labor; they are parasitic beings; of no use, either to themselves or their fellow-creatures. If they work, it is necessary to direct and excite them incessantly, since they are excessively indolent. In hospitals, these imbeciles are the servants or laughing-stock of every body. They are the good people of the house, and are called, more especially, imbeciles. This variety is denominated by authors, *fatuity*. Imbeciles of this character, present some points of resemblance with maniacs without fury, in the mobility and versatility of their ideas, sentiments, desires and actions.

There are other imbeciles however, who possess a small number only of sensations and ideas, and have little memory. Their language also is limited. They distinguish those with whom they live, love their relatives, and are mindful of the cares that are extended to them. They are passionate, thievish, obstinate and peevish. The sight of a person of the opposite sex agitates and disturbs them. They are capable of receiving a trifling amount of education, and it is possible, by dint of effort, to develop that portion of sensibility and understanding which they possess. Still, this education is limited to the ordinary matters of life. Habit, and the force of imitation, produce a great effect upon their ideas, affections and acts; impressing upon their mode of life a kind of regularity, which it would be wrong to regard as the effect of reasoning. They provide for their wants, know how to clothe themselves, procure nourishment, and are capable of performing ordinary household labors.

Finally, there are imbeciles, the faculties of some of whom are more energetic than those of others, and whose understandings are capable of partial development. They have an aptitude only for certain things, for which they have a decided taste and a marked inclination. They possess an understanding for whatever relates to their inclinations and aptitudes, and

judge of them very correctly; but are incapable of every thing else. They sometimes learn a trade, but nothing more. They also learn to read, but cannot write. They understand music in some instances, and play upon an instrument, but can neither read nor write. You can oblige them, neither to remember, reflect nor foresee. They produce nothing, invent nothing, perfect nothing. Such are partial imbeciles.

The innocence and jovial manners; the gayety and piquant repartees; the pleasant and sometimes very judicious sallies of some imbeciles; have caused them to be admitted into the presence of the great, and even that of kings, to divert them from their distressing ennui, and to afford them recreation. There is, in courts even, *the post of fool.* All those who discharged the duties of this office were not imbeciles, some of them being adroit rogues. If Triboulet was a witty imbecile, Angely and Brusquet were adroit knaves, who gave proof of their intelligence, by amassing immense fortunes.

The custom of having fools to entertain the great, reaches back into remote antiquity. History tells us that *Lucius Junius Brutus,* simulated folly so well that *Aruns* and *Titus,* sons of *Tarquin,* having been sent to Delphos to consult the oracle, brought him back, to make sport for them. This ridiculous abuse was handed down even to our own time, and was so general in the middle ages, that a council, held at Paris in 1212, defended the bishops for having about their persons, fools *to make them laugh.* Charles V., says Le Sage, caused a letter to be written to the mayor and magistracy of the city of Troyes, to have them, as was customary, provide him with a fool, *Thevenin,* his own fool being dead. If the great had their fools, the people indemnified themselves, by celebrating in different cities, what was called the feast of fools. Potemkin, had for his fool, one Mossé who, according to M. de Ségur, did not conceal the truth from his master.

Imbeciles are usually timid, cowardly and obedient. Evil-doers but too frequently abuse their unfortunate dispositions, and employ these wretched beings to set fire to buldings, or commit some culpable act, by intimidating or seducing them, by the allurement of a recompense, which flatters their senses or appetites. Since imbeciles are not deprived of all intelligence, they possess desires and passions proportioned to the development of their sensitive and intellectual faculties. They have inclinations more or less imperious, and sometimes perverse ones. They rob to satisfy their gluttony; to procure articles for the toilet; or from some other motive. We saw, in the chapter on Monomania, the cases of incendiary imbeciles described. At the epoch of puberty, the instinct of reproduction becomes developed, and imbeciles become amorous; yielding themselves to the practice of onanism, to a degree the more frightful, as they are ignorant of the evils to which this dreadful habit exposes them. Men seek for women, girls become coquettes, and those are often brought to hospitals between the ages of fourteen and eighteen years, who, having attained to puberty, pursue men, are intractable, and regardless of the commands of their parents. There was once at the Salpêtrière an imbecile, who fulfilled the severest labors of the house, for a very trifling consideration. In several instances, after having obtained a few sous, she carried them to a working man, and abandoned herself to his lust; returning to him no more, after she became pregnant. The following case shows that imbeciles are not always deprived of moral sensibility, and are capable of becoming melancholics.

A girl whose name was V., tall, with chestnut-colored hair, blue eyes, flushed face, a changeless physiognomy,—though sometimes indulging in a stupid laugh,—was admitted at the Salpêtrière May 27th, 1811, aged twenty-two years. From early life, it was observed that her understanding was not developed in proportion to the organic growth. She remained incapable of articulating distinctly, and could acquire nothing. When fourteen she men-

struated. She grew tall rapidly, and suffered from convulsions, particularly at the menstrual periods, notwithstanding the flow was abundant. At the time of her admission into the hospital, she had the appearance of a person in the enjoyment of perfect health, but could not reply to the most simple and ordinary questions, though she endeavored to do so; making a sign that she comprehended them. She uttered cries, and often continued to cry for a quarter of an hour. Her appetite was good, and her sleep equally so. Her dejections were often involuntary. She knew not how to dress herself, but displaced nothing, and was mild and obedient. From the movements going on around her, she was accustomed to judge as to the time of rising, retiring, or taking her meals. She very readily found her ward on returning from her walk. In a word, she had an understanding of the primary wants of existence, but nothing farther. Though never passionate, she was susceptible of ennui. During the month of July, 1812, she was struck by one of her companions, and was so deeply grieved in consequence of it, that she was no longer willing to partake of any thing but water. Profound sighs often escaped her; she became emaciated; scorbutic patches appeared; she grew feeble; and in the month of September was confined to her bed, and vomited blood. Refusing all nourishment and every remedy, she was seized with a slow fever, and died October 31st, 1812.

At the post-mortem examination, which was made on the 1st of Nov., I found the cranium voluminous and thickened, and the brow very projecting. The facial angle measured more than 70°, the median line of the cranial cavity was warped, the dura-mater very adherent to the cranium, the external lamina of the arachnoid covered with a false membrane, resembling the fibrine of blood, a serous effusion into the cavity of the arachnoid which was slightly injected, and serum at the base of the cranium. The brain was very dense, the grey substance discolored, and the white injected. The membrane which lines the lateral ventricles had formed adhesions at several points; a circumstance which lessened their capacity. There were serous cysts in the tissue of the choroid plexuses. The peduncles of the cerebellum, very near the annular protuberance, were disorganized; their substance in this portion was greyish and puriform to the extent of two or three lines in breadth, and six or seven in depth; the pineal gland appeared to be cartilaginous, and the cerebellum was very dense. The peritoneum, particularly in the pelvic cavity, was dotted with small black points. The ascending colon and cœcum were reddish externally, whilst their mucous membrane was brown. The gall bladder contained bile, inspissated, grained, and very brown. The hymen closed the entrance to the vagina, and the ovaries were very much injected.

Imbeciles possess therefore sensibility, a certain degree of intelligence, and a weak memory. They comprehend what is said to them, make use of speech, or if mute, express themselves by signs. They are capable of acquiring a certain amount of education, and possess moral affections: but given up to their own control, they very easily become degraded. Imperfectly nourished, and poorly protected from the effects of the weather; filthy in their habits, and giving themselves up to errors of regimen; their health becomes impaired; the little intelligence with which they were originally endowed, enfeebled; and at length, the imbecile, who is brought to a hospital, presents all the characteristics of idiocy.

Second variety.—Idiocy.—We have, at last, reached the utmost limit of human degradation. Here, the intellectual and moral faculties are almost null; not that they have been destroyed, but never developed. Among idiots, the want of intelligence and sensibility, is often in proportion to the vices of organization. There are merely the rudiments of intelligence, and instinct controls all the faculties. The power of speech even, does not exist. In rare

instances, we find certain faculties developed, and a natural aptitude for the exercise of certain talents.

Quénau was admitted at the Salpêtrière in 1781, at the age of ten years. She had a good constitution, and an ordinary fulness of habit. The face was more fully developed than the cranium. The top of the head was depressed, the occipital portion small, the forehead flattened and receding. The following admeasurement was taken during life:

Circumference	20.07 in.
From the curve at the root of the nose, to the tuberosity of the occipital bone . .	11.33 "
Antero-posterior diameter	6.92 "
Bi-temporal diameter	5.63 "
Total	43.95

Her physiognomy is stupid; expressing sufficiently well her disposition to beg. She is constantly exposed to the air, whatever the weather; extending her hand to every one for a few pieces of money, with which she purchases food, as she has a craving appetite. It is necessary to dress her. When she attempts to speak, she utters a hoarse cry, or a sort of articulate, jerking grunt, which she continues, until she is understood. She comprehends by a gesture, what is intended to be communicated to her; provided it has reference to nothing beyond the most common wants of life. She is grateful to the nurse who attends upon her; and to those who give her money, or food; and expresses her thankfulness, by kissing her fingers, and raising her eyes upwards. She understands, when spoken to slowly, and in a loud tone of voice. Though habitually gentle, she becomes angry when she cannot satisfy her gluttony, and tears all her clothing except her chemise, which she preserves from a sense of shame; taking care to cover her throat with her hands. She has never been able to learn a trade.

This imbecile is, notwithstanding, a musician. Does she witness dancing, she leaps in time; or does she hear singing, she repeats in a rough voice, not the words, but the airs, of which she has learned a great many. A pupil at the Salpêtrière plays upon the violin; Quénau follows the sound, and with a curious attention, seeks from whence it comes, and gradually approaches the musician. M. Guerry improvises an air. She follows him; retaining and repeating it, when requested. He commences an air, and she follows him quite to the close. M. Després, an interne of the hospital, sings a complicated air; Quénau redoubles her attention, fixes her eyes upon the pupil, contracts her features, and endeavors to put herself in unison with the singer. Fruits, of which she is extravagantly fond, are placed at her door; and she manifests, both by her looks and gestures, her desire to take them; but at the moment when she is ready to lay hold of them, M. Després beats time and sings. She immediately begins to beat time also, and abandons the fruits, which she seizes upon with avidity, so soon as the singing ceases. Does one play upon the flute, Quénau is all ear. So attentive is she, as to repeat the airs played.

On the 25th of August, 1833, M. Litz, at the invitation of M. Leuret, with pleasure assisted in the following experiments, which were made in presence of Doct. Mitivié, in the study of M. Pariset, physician of the division of the insane at the Salpêtrière.* M. Litz improvises several airs. Quénau takes them up, but experiencing difficulty in repeating them,—her voice being incapable of reaching the pitch in which this celebrated musician sang;—her

* M. Leuret published a detailed account of this experiment, with the *phrenological* history of Quénau in the Medical Gazette, for the year 1836.

features express both the effort and inconvenience. M. Litz touches the piano: Quénau is motionless; her eyes watching the fingers of the great performer; or else she commences a sort of convulsive movement; turning herself in various directions; biting her fists; stamping with her foot; raising her eyes upward; and using every effort to put herself in unison. The transition from a grave to an acute sound, provokes a sudden contraction of all the muscles, as if she was agitated by an electrical discharge. This last experiment was repeated more than twenty times, and always with the same result. Doct. Leuret induces her to leave the study, and shows her some apricots. As soon, however, as M. Litz touches the piano, she returns, and while the instrument is to be heard, her eye is fixed upon the musician, and she returns to the apricots only when the music ceases. Notwithstanding this singular musical capacity, her cranium does not offer the protuberance pointed out by Gall, as indicating the organ of music. On the 15th of January, 1837, Quénau, at the age of sixty-six years, died of acute pneumonia. At the post-mortem examination, which was made by M. Mitivié, physician to the division of the insane at the Salpêtrière; it was shown that the scalp was somewhat thicker on the left than the right side, that the median line inclined to the right, that the pia-mater was slightly infiltrated, and that the brain, which was somewhat soft, presented no remarkable lesion. The lung presented changes, characteristic of the disease of which she had died.

G. is admitted at the Salpêtrière in 1813, at the age of nineteen years. She is of small stature, and moderately full habit. Her head is very voluminous, and its conformation irregular. The forehead is remarkably high, large and projecting; and the frontal protuberances are very prominent, particularly the left. The facial angle is more than ninety degrees. Her hair is a blond, the eyes small, of a chestnut color, and concealed beneath her arching eyebrows. She is cross-eyed; her mouth is large, teeth white, and her complexion swarthy and sun-burnt. Her physiognomy is convulsive, and habitually expresses mildness and joy. The following dimensions were taken while the subject was still living:

Circumference of head	20.63 in.
From the curve at the root of the nose, to the occipital tuberosity	12.91 "
Antero-posterior diameter	7.28 "
Bi-temporal diameter	5.90 "
Total	46.72

She eats gluttonously, and without discretion; crowding forward with her fingers, the food which she has accumulated in her mouth; still not possessing sufficient intelligence to go for it, at the hours of distribution. The dejections are involuntary, and the menses abundant and regular. She walks little; all her movements being convulsive. She draws along the left side of the body, and uses her left arm with difficulty. It is necessary to dress her when she gets up, and to put her to bed like a child. She is insensible, and protects herself neither from the heat, cold nor rain. She recognizes the nurse who attends upon her, often embraces her, expresses her joy and recognition of her by kissing her hand, smiling, and shaking her head. Her disposition is extremely mild and good. If a disturbance occurs at any time, she goes and informs the person in charge. She is obedient, as well as very obstinate. She takes care to cover her throat whilst being dressed, and if a wish seems to be manifested to raise her garments, she removes the offending hand. Nevertheless, she does not blush; showing that she does not possess the sentiment of shame; and the indications of decency which she manifests, are the result of

habits contracted in infancy. She articulates the following syllables only; pa-pa, ma-ma, which she repeats on every occasion, as well to express her anger, as to testify her joy. She constantly carries in her right hand some rags rolled up into the shape of a doll; and to testify her satisfaction or resentment, she strikes it violently, several times in succession, upon the right temple. She has retained a fragment of a popular air, which she sings often, over and over again, with an expression of satisfaction. The condition of this female remained a long time stationary; but within four years she has made some slight intellectual advancement. She now goes after her own food, calls for it if forgotten, and rejects what does not suit her. Her dejections are involuntary only during the night. In the day-time she goes to the privy. She articulates, though imperfectly, certain words, which she employs to express her desires. She exerts herself to repeat what she hears, without being able to effect her purpose. She makes numerous grimaces; seeming to attach to them ideas, which she cannot otherwise express.

M. V., is the offspring of a mother who, during pregnancy, remained in a state of stupor. Notwithstanding the cares lavished upon his infancy, his health was very feeble, and it was not until he was six years of age that, one day while playing, he suddenly pronounced the word papa. When seven years of age, he had a very severe attack of cerebral fever, which, however, did not prevent the development of the organs, but was followed by a serious disturbance of the intellectual and affective faculties, and arrested their development, already so feeble and backward. After this period he becomes irritable and turbulent. He tears, breaks, strikes and spits upon those who approach him, and utters, both night and day, piercing and plaintive cries. He is easily frightened; noise, the sight of animals, etc., producing this effect. Some one having called him a *hog*, he remembers, and still frequently repeats the word; employing it on every occasion. When ten years of age, he was placed at the Institution for the deaf and dumb at Paris, without results favorable to the development of his understanding. At a later period, he was placed at a private hospital, and at length committed, several years since, to a lady who lives in the country, and who takes the utmost care of this wretched child. When seventeen years of age, his stature is 27.75 inches. The vertebral column is slightly curved in the dorsal region. The top of the head is slightly depressed; the hair of a deep chestnut color, abundant, harsh and bristling;—a circumstance which prevents one from judging of the flattening of the vertex. The eyes are blue, the look mild, the mouth largely cleft, and the lower lip thick. The physiognomy, though habitually convulsive, is not wanting in expression, and is sometimes sad and melancholy. The countenance is wrinkled, in consequence of his habitual grimaces. The following are the admeasurements of the head taken from the living subject :

Circumference	21.53 in.
From the curve at the root of the nose to the occipital tuberosity	12.99 "
Occipito-frontal diameter	7.08 "
Bi-temporal diameter	5.99 "
Total	47.59

His limbs are well developed, and his skin white. He often suffers from furuncles on different regions, and from aphthæ in the mouth. His appetite is not strong, and he prefers vegetables to meats. He likes to be properly served, though he conducts with little propriety himself; as he is constantly spitting about him during his repast, even upon his plate cover. If a new

dish is served up to him, he carries his fingers to his mouth, to indicate that they may give it him to taste. He does so, and if it is not acceptable, pushes it aside. On the contrary, he testifies great impatience to have it, if it is to his taste. His sleep is often interrupted by cries, and lasts only from one to three hours. This young man was never able to learn, either to read, write, or speak. Notwithstanding, some of the intellectual faculties acted to a certain extent. He recognizes very readily, both persons and places. He combines certain ideas, and though he does not speak, articulates, in his own way, certain sounds, of which he forms words, to which he attaches a signification. Thus he says *pa pa paa, ma ma maa*, and applies these syllables to the lady, who has charge of him. He says also *bo bo jour, mé mé*, on taking the hand of those persons who approach him, and whom he knows. He is excessively mobile, being constantly in motion, and suffering from a tremulous movement in all his limbs. He is perpetually in mischief; spitting upon those around him, pinching, patting, kicking, and throwing them down; and afterwards laughing. When he wishes to play a trick upon any one, he assumes a mild and friendly tone, in order to induce them to approach him. While walking in the country, he approaches near to those whom he meets; spits upon them, and escapes, laughing and uttering a cry, *hi hi hi.* On returning from his walk, he hastens to reach home first, and conceals himself, in order to impose upon some of the people of the house. Every object and person that he has not seen before, interest him. If a stranger enters the house in which he lives, he cries and struggles, until he has been recognized by some one of his associates. Before passing from one place to another, he looks attentively, as if to reassure himself by this exploration.

He is sensible of the good that is done him, and becomes irritated by improper proceedings. He is mild, diffident, and timid. If opposed, he carries his complaints to the lady who has charge of him; repeating at the same time, the monosyllables *ma ma ma.* A female servant having struck him upon the arm, he remains irritated during the whole day; crying every moment *ma ma ma;* pointing by turns, to the arm that had been struck, and also to the servant who inflicted the blow; and becoming composed, only when the latter, after a rebuke, manifested regret. On hearing a carriage, he says *brrr*, wishing doubtless to imitate the sound of wheels. He once pronounced the name of his father, whom he had not for a long time seen. He was formerly afraid of animals, but no longer fears them; caressing the horses, and playing with the house dog. He is at all times agitated, and disposed to lacerate his person, although he fears the injury. Within a year particularly, he has torn his lips; dashed his head against the walls and furniture; and struck himself with his fists in his eyes. He would be disposed to onanism were he not watched; and makes attempts *to touch* both men and women.

M. de G., is another idiot, thirty-six years of age, who was admitted at Charenton Aug. 6th, 1825. Whilst pregnant, his mother experienced a severe moral affection. His stature is a little above the medium size; he is of ordinary fulness of habit, his head of a beautiful conformation, his hair of a chestnut color, and his eyes grey: his forehead is large, high and open. His physiognomy is gentle, and vague; yet more expressive than the extent of his understanding would seem to indicate.

Great circumference	22.44	in.
Antero-posterior curve	13.89	"
Transverse curve	13.38	"
Antero-posterior diameter	7.87	"
Transverse diameter	6.49	"
Total	64.07	

The limbs are well formed, and his head is habitually inclined toward the earth. The trunk inclines slightly forward, the fore-arms are flexed, and the fingers constantly bent; the thumb of the left hand alone being extended. The hands, also closed, are affected with a kind of convulsive trembling. When he walks, he approaches walls or trees, in order to rub his garments against them. When he descends a stair-way, or a sloping ground, he walks slowly, and endeavors to support himself, throwing his body backward and his arms in front. The motion of his fingers and arms, the balancing of his head and trunk from before backward, give to his attitude something altogether peculiar. His health is good, the functions of nutritive life are satisfactorily executed, and his appetite is excellent. He eats his soup with a spoon, but if his bread and other food are not cut into morsels, he becomes impatient, goes around the table, takes the meat in his fingers, looks at it, puts it again upon his plate, takes it up again, carries it to his mouth, and after making certain vain efforts to divide it, throws it upon the floor. If his food is cut in pieces, he takes it with a spoon, not knowing how to use a fork.

It was with much difficulty that they accustomed him to wear a cap, and take care of his shoes, stockings and gloves. Some years since, while making his toilet, he was wounded at the end of one of his fingers; since which, he conceals his fingers, whenever any one attempts to touch them. It is to him a great trial to have his nails pared, and his feet washed. It is necessary to confine his gloves to his wrists, which makes him sad. He looks steadily at his hands, and makes great efforts to free himself from this appendage. Incapable of unbuttoning his clothes, if he has a want to satisfy, he goes to his own, or some other attendant, (never to the patients), asks, by signs, their assistance, and goes with them to the privy. If there is no domestic at hand, he goes out alone, but being unable to undo his clothing, soils himself; when he dares not again go out, until some one comes to cleanse and bring him in. He rises from his bed at night, evacuates the bowels or bladder upon the middle of the floor of his chamber, and again retires. He sleeps well; retiring and rising at fixed hours. When the hour for getting up arrives, he informs his attendant by striking together his teeth. If the servant delays, he leaps from his bed, and walks about in his shirt. If desired to remain in bed, he becomes impatient. When he retires, he takes the bolster in his arms, turns upon his face, laughs aloud several times, and goes to sleep. He was never able either to read or write, or to articulate the least sound; although he was not deaf. He distinguishes both persons and things, of which he has daily observation. He recognizes his attendant without difficulty, as well as those persons who manifest an interest in him; looks for them again, and smiles at their approach; while he flies from others, and looks sad when they come near him. He is very submissive, both to the gestures and voice of his attendant, whom he servilely obeys. Until the age of twenty-one years, he was accustomed to sing incessantly, without articulating any sound. At this epoch however, he ceased to sing, after an attack of acute articular rheumatism. Notwithstanding, music still produces a powerful impression, and strongly excites him. The excitement is proportionate to the number and noise of the instruments. On endeavoring to make him hear the sound of a flute, he seemed to be scarcely sensible of it. When, on the contrary, he hears loud-sounding music, he bursts into a fit of laughter, and dances or leaps almost in time. Since the period of puberty, the presence of women exercises upon him a remarkable influence, though less energetic than music. On being embraced one day, by a lady who paid him certain special attentions, his joy and excitement were not augmented, although his countenance was expressive of satisfaction. He is an onanist. He refrains during the day, because he is watched; but when in bed, if left alone, he abandons himself to this fatal practice; ceasing so soon as he is spoken to, or perceives that he is observed. It has been noticed,

that on being put upon his bed without any covering, he abstains. Is it fear or shame that restrains him? This is not his only vicious inclination. He robs the sick of their wine, and is very careful to conceal himself both from them and the attendants.

E., aged twenty-three years, is of small stature, but large, thick set, and provided with much fatty cellular tissue. The forehead, rising at a right angle, is flattened. The temporal regions are prominent. Her hair is abundant, of a chestnut color, and harsh. Her eyes are dark, small, crossed, and almost constantly convulsed; which causes them to be directed upward. Her physiognomy is mild, and somewhat expressive. The arms are short, slightly rigid, and move convulsively. She is unable to open her hands completely. The fingers are almost invariably flexed, and, as it were, contracted; being capable of extension, only one by one, and then slowly, and with effect. Ordinarily the index only remains extended. The head rises rounding to its summit, and is flattened from before backward; so that the fronto-occipital diameter is less than the bi-temporal; as the admeasurements of the head, taken upon the living subject, indicate.

Circumference	20.00 in.
From the curvature at the root of the nose to the occipital tuberosity	11.81 "
Antero-posterior diameter	6.10 "
Bi-temporal diameter	6.33 "
Total	44.24

She is well nourished, though she eats sparingly. Her dejections are easy, and her menses regular. Her gait is painful; waddling and hesitating. She moves with little assurance, and remains habitually in a sitting posture. Her sensations are fugacious, and she has little memory. She recognizes persons whom she often sees, and knows how to count as far as twenty and beyond. If one asks for a certain number, she shows, in her way, as many fingers as there are units in the number demanded. She knows the value of certain pieces of coin, and distinguishes the utensils that she is asked for, if they are at hand. She is fond, both of flowers and fruits. She does not speak; but understands, and goes to seek the object, the name of which has been mentioned to her. She never learned to talk. She expresses her thoughts and affections by two sounds, the one prolonged, *hihihiii;* the other, *héhéhéé*, which she forms by hastening the respiration, and modulates variously, according to what she desires to express. The affective qualities predominate in this case. She is very affectionate, and attaches herself to those with whom she resides, especially to those who have the care of her. She came from the Orphan's Hospital with an imbecile, with whom she is pleased, and shares her food, with whatever else is given her. If any one of her companions commits an act which leads to enquiries, she interests herself in it. She is timid, very modest and always decently clad. She testifies her affection after the manner of certain animals: by approaching those who are the objects of it, rubbing herself against them, panting, and making many gestures.

Aba is an idiot of the Bicêtre, about thirty years of age. His stature is below the medium size, his limbs well formed, his head large enough, but flattened posteriorly; the forehead is low, the nose broad and flat, the mouth large, and the physiognomy vague, uncertain, and without expression. He sometimes seems to meditate. Sometimes, his physiognomy expresses a slight smile, and a malicious aspect, particularly when he beholds strangers. His head, on being measured, presents the following proportions:

Circumference	20.98 in.
Occipito-frontal diameter	7.20 "
Bi-temporal diameter	6.10 "
From the curve at the root of the nose to the occipital protuberance . . .	12.59 "
Total	46.87

His physical health is good; his movements are free; he eats slowly, and often stops in the attitude of a man who thinks, fears, is astonished, and curious; which emotions however, soon cease. He soils his bed. The sensibility and understanding of this idiot were arrested, so to speak, in their rudimentary state. His sensations are slight and temporary. Attention is very feeble, and can be brought to bear but upon a small number of objects; and the memory is almost null. He comprehends some things that are said to him; for instance; to wash himself, and to go to bed. He occasionally makes some noise by rubbing the teeth together, and seems to be pleased by it. He knows the attendant who has charge of him, but does not speak. He merely pronounces in a low tone, the syllables *ba, ba, ba,* which he repeats on every occasion. He has contracted certain habits like the following: he dresses himself; goes after his food, and retires to answer to the calls of nature. He collects all the little motes which settle upon his arm, or which he finds upon the garments of others. I presented to him, says M. Leuret, physician to the division of the insane at the Bicêtre, who communicated this case to me, a piece of money. He smiled on receiving it, looked at it, turned it over and over, put it to his mouth, and then handed it back to me. I show him apples, and he takes them with manifest pleasure. He nibbles one of them, at first round and round, but finally swallows it, even to the seeds. I extend my hand, in order that he may give me one of them, and he understands; presenting me the apple which he is eating, but without letting go of it. I repeat the act; he presents me a piece, and retires smiling. An attendant takes one of them from him, and leaves the chamber in which we were. Aba follows him with his eyes; but having lost sight of him, appears to have no farther recollection of him. After some minutes the servant re-enters, and Aba extends to him his hand for his apple.

Aba is an onanist as well as a thief; robbing, even with address, particularly articles of food; and the vice is carried in his case, to a very considerable extent. He had one day robbed a companion of his food, who, in order to punish him, endeavored in the contest to plunge his head in a bucket of cold water. Aba was thrown down, and one of his arms fractured. During the efforts at reduction, he manifested no pain, and even seemed to smile. Did he suffer? He often showed me the injured arm, while the apparatus was upon it, and some time indeed, after its removal.

Matteau, at the age of ten years, was admitted at the Salpêtrière, May 7th, 1836, and the following observations made in 1837. She is both rachitic and epileptic. Though she was the offspring of a bandy-legged father, her mother had given birth, both before and after her confinement with M., to healthy, and well formed children. The stature of this idiot is 51.02 inches. Her hair is of a light chestnut color, her eyes blue, eyebrows blond, and her look fixed, and without expression. Her eyelids, usually in motion, are sometimes closed, as if she slept. The forehead is low, and the supra-orbital protuberances, salient. She has a rounded snub-nose. The inferior lip is large and pendant, and the physiognomy, ordinarily stupid, becomes animated, only when expressing pain. The admeasurements of the head, are as follows:

Circumference	19.13 in.
Fronto-occipital curve	10.63 "
Antero-posterior diameter	6.85 "
Bi-temporal diameter	4.68 "
Total	41.29

We notice, in the case of this idiot, a deviation of the spine to the left; an ulcer about the size of a twenty-five cent piece, occupying the middle of the back, and a vast cicatrix, extending over a great portion of the left posterior region of the trunk, the neck and superior extremity, and over the posterior and superior part of the thigh of the same side. This ulcer, and these cicatrices, are the result of a fall into the fire during an epileptic seizure, to which she has been subject, from the age of seven years. When eighteen months old, this girl suffered from convulsions, which arrested her physical and intellectual development.

On her arrival at the hospital, she refused all nourishment, and passed neither urine nor fecal matter, for three days; after which variola made its appearance. The course and termination of the latter affection, were regular. After that period, the epileptic attacks occurred daily, and were sometimes, five or six in number, during the twenty-four hours. She is habitually motionless; her head inclined to the right, or resting upon the breast, and the forehead reposing upon the knees. One of her arms hangs by her side; the hand strongly flexed upon the forearm, and the fingers upon the hand. The other is usually in the mouth; the lips performing the action of suction, either upon the hand, or the arm of the chair in which she is fastened. If permitted to stand up, she totters, and sits down awkwardly upon the ground. However, she sometimes leaves her seat, and takes a few steps. If touched at any time, she utters piercing cries, opening widely her mouth, and knitting the eyebrows. She often cries during the night. A stranger to the noise which she makes, she is not disturbed either by singing, cries or noise. She knows those who have charge of her, and caresses them. Is she shown the door, and, at the same time, informed that her brother has arrived; she turns her eyes slightly in the direction indicated. She only pronounces the words *pa pa*, *ma ma*, and sometimes the syllables *coc coc*, at the same time, regarding the sun. She is incapable of putting on her clothes, and of entertaining any notions of propriety, or any consciousness of her wants. When she witnesses the distribution of food among her companions, she opens her mouth, and extends her hand, as if to demand her share. Finally, she eats much, voraciously, and without discernment. Her dejections are involuntary, and she yields herself to the practice of onanism.

Before analysing the cases which precede, in order to deduce from them general views respecting idiocy, ought we not, by new facts, to reach that degree of idiocy, which is the extreme limit of human degradation, in which even instinct no longer exists; that limit at which man, deprived of every attribute, is no longer any thing more than a monster which vegetates? Pinel has published the history,* together with a design of the cranium of an idiot, who was at the Salpêtrière in 1805. It resembled the sheep, both in its tastes, its mode of life, and the form of its head. She had an aversion to meat, and eat, with avidity, both fruits and roots; drinking nothing but water. Her demonstrations of sensibility, of joy or grief, were limited to the repeating of the words, imperfectly articulated; *bé*, *ma tate*. She would alternately flex

* A Treatise on Mental Alienation, Paris, 1809, in 8vo. p. 179.

and extend the head, and rub it against the breast of her nurse. If she desired to resist, or express her dissatisfaction, she sought to strike, with the crown of the head inclined. She was extremely choleric, and many times, I saw her in the bath, making efforts to get out, and repeating in an acute tone, *bé, bé, bé.* The back, loins and shoulders were covered with flexible and black hair, from one to two inches in length. She could never be induced to sit in a chair, or upon a bench, even to take her food. No sooner was she seated, than she slipped down upon the earth, and was accustomed to sleep with her extremities closely gathered about her, after the manner of animals. Pinel examined this case, and furnished us with the dimensions of the head of this idiot, compared with those of the cranium of a little girl of seven years:

	Idiot of 11 years.	Girl of seven years.
Length of cranium . . .	5.11 in.	7.08 in.
Breadth	3.53 "	5.11 "
Depth	5.11 "	6.29 "

Gall has in his collection, and exhibited at his lectures, a plaster cast of the head of an idiot, resembling in every particular, that published by Pinel.*

The state of degradation of some idiots is such, that they are deprived of certain of the senses, do not possess the instinct of self-preservation, and lead a life which is altogether negative. We had at the Salpêtrière in 1812, an idiot who was found lying by the dead body of her mother, who was supposed to have been dead for three days. On being sent to the hospital, June 20th, by order of the police, this idiot, who was twenty-seven years of age, very much emaciated, very pale, rachitic, blind, and deaf and dumb, uttered, from time to time, an acute, although inarticulate and stifled cry. Her limbs were atrophied, and, being drawn up under the thighs,—she could not walk. It was necessary to convey liquid aliments into the mouth, and even so far as the œsophagus. She knew neither how to chew nor swallow. She was nourished with broth and wine, and died at the expiration of a few days. The weight of the dead body was forty-three pounds; the bones of the cranium spungy, and very thin; being only from .11 to .15 of an inch in thickness. The brain, which was atrophied, did not possess half its original weight, and the convolutions were narrow, close and shallow. The cortical substance was discolored, and the white very dense, and yellowish. The lateral ventricles, very slightly developed, were destitute of serum. I was unable to preserve the skeleton; the bones being destroyed by maceration.

In 1817, there died at the same hospital, an idiot twenty-five years of age, who was deaf, dumb, blind and rachitic. She could not rest upon the back, in consequence of the vicious conformation of the trunk; and not having the instinct to change her position, it was necessary to turn her from time to time, now upon one side, and now upon the other. If placed in a sitting posture, she had not the strength requisite to maintain it, and allowed herself to fall down again. When food was conveyed to her mouth, her lips and head were slightly moved, as if to withdraw them from the article which was presented her. By crowding the spoon into her mouth, the jaws separated, but it was necessary to carry it quite to the œsophagus, in order that the food might reach the stomach. Always sitting upon the haunches in bed, she loved to be covered, even in summer. If the coverings were removed, she uttered a harsh cry, and endeavored to replace them with her hand; but if they were not near, she ceased her efforts, and remained gathered up in bed. She was accustomed to

* Functions of the Brain.

pronounce very imperfectly, rarely, and without motive, the syllables *mâ, mâ*, especially when touched. If she perceived any one approaching her, she uttered a cry similar to that of a cross dog, which she once repeated, whenever they commenced feeding her. She died four months after her admission into the hospital. The following is the result of a post-mortem examination. The head, at first sight, does not appear very irregular, but is small, and the occipital region compressed. The forehead, slightly elevated, and depressed laterally, retreats immediately above the superciliary arches. The two eyeballs, present no trace of organization, and the crystalline lens is very small, hard, opake, and of a dull white color. The two superior conoidal teeth are double, and fixed, the one before the other. The bones of the cranium are thin and spungy, and very easily cut. On exposing the dura-mater, the convolutions are not apparent, and a fluctuation is experienced beneath the meninges. The latter being cut, a large quantity of serum flows forth, contained in the lateral ventricles, which were dilated, at the expense of nearly the entire cerebral substance. The pia-mater is, in some sort, invested by a stratum of cere bral substance, of not more than 25 or 30 millimetres (.98 or 1.18 inches) in thickness. The folds of cerebral substance which separate the two ventricles, the cornua Ammonis, and the corpora striata are destroyed. The corpus callosum is very dense and slightly yellow, the optic thalami are atrophied, and their gray substance of an ash color. The optic nerves are reduced to the neurilema merely. The lungs are contracted and atrophied, although crepitating. The heart, which is small, and its muscular substance pale, is easily torn. The skeleton, which I have preserved in my collection, is very remarkable. The cranium, on being measured, furnishes the following proportions:

Entire height of the skeleton . . .	41.73 in.
Circumference of the cranium . .	18.89 in.
From the curvature at the root of the nose to the occipital tuberosity	10.43 "
Antero-posterior diameter . . .	6.18 "
Bi-temporal diameter	5.35 "
Total, embracing only the four last numbers .	40.85 in.

The spine presents a curvature, which is concave towards the left, and extends from the eleventh to the twenty-first vertebra. A second curvature in the opposite direction, is formed by the lumbar vertebræ, whose apophyses are firmly united. The ribs of the left side, proceed directly forward from their angular points, and those of the right instead of being convex externally, project, by their convexity, into the thoracic cavity. The sternum projects almost horizontally, and its abdominal apophyses is wanting. The pelvic bones have not the normal form. The iliac portions are convex towards the pelvic cavity, and separated anteriorly, to the extent only of 1.57 of an inch. The pubic portions, projected anteriorly, approach each other so nearly, that they touch at some points; whence it results, that the pelvic basin is almost obliterated. The lower extremities are slender, and all the bones present nodosities, numerous false unions, and defects of ossification. The left thigh is larger and shorter than the right, and slightly twisted towards its inferior extremity. The heads of the thigh bones are atrophied, and that of the right is only .39 of an inch in extent. The corresponding cotyloid cavity does not exist. The humerus, as well as the radius and ulna, present several swellings and adhesions. The lower jaw, ribs, scapulæ, the metacarpal bones, and certain of the phalanges of the left side; together with the bones of the metatar-

sus, present numerous vices of conformation, resembling consolidated fractures. The skeleton is very light; the bones have lost their polish, are rough, fatty and yellowish. The bones of the cranium are spungy and thin; being only from 4 to 6 millimetres (.15 to .23 of an inch) in thickness.

During the same year, there was brought into the division of the insane at the Salpêtrière, an idiot who had been found in one of the bateaux, which descend from the Bourgogne to Paris. She appeared to be about twenty years of age, and was both deaf and dumb. The abdomen was greatly distended with serum. Her head was small, inclining to the right. The eyes, which were blue, remained open and fixed, the dilated pupils not contracting. The eye-lids did not close on the approach of light. Nevertheless, this idiot seemed to look, as children are accustomed to do, when they begin to see. She manifested besides, no sign of sensibility, whether she was touched or pinched, or the coverings by which she was surrounded, were removed. The dejections were serous, frequent and involuntary. When liquid aliment was presented in a spoon to her lips, she was accustomed to open wide her mouth, and keep it open, so long as fluids were poured into it, which it was necessary to convey to the fauces, in order that they might pass into the stomach. She did not shut her lips, until two or three minutes after they had ceased to feed her. The body reposed upon the left hip, in such a way that she could not extend herself upon the bed, but remained there slightly inclined, sustained by pillows, and maintained this position, having neither instinct, nor the power to change. She died at the expiration of a month, without serious suffering, and on opening the body, we found the left ventricle of the brain distended with serum, which had taken the place of the cerebral lobe of the same side, which no longer existed. The convolutions of the right lobe were extremely small, shallow, and much compressed; the right ventricle being almost obliterated. The cerebral substance, which was very dense, and stretching rather than tearing, was of a dirty white. The cerebellum was small, and remarkably hard, particularly the gray substance, which was almost friable, at the surface of this organ. The arachnoid was infiltrated and thickened, without adhesions. The gray substance of the remaining portions of the organ, was pale. The lungs were atrophied, and compressed into the superior portion of the chest; and the pleuræ contained serum, as well as the peritoneal cavity. The heart was small and very soft. The muscles were pale, and easily torn.

The skeleton of this idiot, which makes a part of my collection, is remarkable for its lightness, and the enormous curvature of the vertebral column, as well as the peculiar direction of the pelvis, and the narrowness of the left cavity of the thorax. The head is small, a little inclined to the right, and more developed in the direction of its depth than breadth. The cranium is flattened at the sides, and a little depressed anteriorly. The forehead is narrow, retreating rapidly, and presents at its middle portion an unequal swelling, circumscribed by a circular depression. The coronal suture is not entirely closed. The thickness of the bones of the cranium,—of which I shall furnish the admeasurements,—is only from three to four millimetres (.11 to .15 of an inch.)

Measure of the cranium.

Circumference	17.32 in.
From the curvature at the root of the nose, to the posterior margin of the occipital foramen .	10.03 "
Antero-posterior diameter	5.98 "
Bi-temporal diameter	4.60 "
Total	37.93

The cervical portion of the vertebral canal, is nearly straight, but twisted in some sort upon itself; whence it happens, that the bodies of the superior vertebræ are turned to a trifling extent to the right, which occasions the deviation of the head to the same side. The inferior half of the spine, describes an arc whose chord is 3.14 inches. The convexity of the curvature projects downward and to the left, while the concavity is upward and to the right. The bodies of the vertebræ, are therefore turned almost entirely to the left. The pelvic cavity is so far changed from its usual position, that its superior opening is directed downward and to the left, whilst the inferior one is directed backward, and to the right. The pelvis has been rotated laterally, placing it horizontally beneath the base of the chest; the iliac portion of the right coxal bone, the cotyloid cavity, and the anterior border of the left iliac, almost touching the ribs. The trunk, during life, reposed upon this margin, which had undoubtedly caused the swelling and erosion of the left anterior and inferior iliac spine. The heads of the thigh bones are very small, and the cotyloid cavities shallow, and irregular in their circumference. The left margin of the sacrum looks downward, and the right upward; so that the position of this bone is almost horizontal. The thorax, which is thrown to the right, is formed almost wholly of the right cavity, which is 5.90 inches in diameter, whilst the left is only .98 of an inch. The ribs of the left side, on reaching their angles respectively, project abruptly before the spinal column. The sternum is thrown to the left.

Idiots are rachitic, scrofulous, epileptic or paralytic. The head, either too large or small, is badly formed; and the occipital region flattened and small, in proportion to the face. The features are irregular; the forehead is low, narrow, and almost pointed; retreating greatly, and more salient on the right than the left side. The eyes are convulsive, crossed, and of an unequal size, and the lips are thick. The mouth is large, and when open, permits the saliva to escape. The gums are fungous, and the teeth decayed. The defective conformation, or want of symmetry in the organs of sensation, indicates clearly enough, that the action of the senses is imperfect. Idiots are partially or entirely deaf, or hear imperfectly. They are mutes, or articulate with difficulty, certain monosyllables. Their incapacity to speak, depends upon their deafness, on the imperfect conformation of the organs of speech, and upon the circumstance, that they are incapable of imitating the movements, adapted to the articulation of sounds. Some utter cries more or less acute, suppressed or harsh. Deprived of an eye, they see imperfectly, or are blind. Taste and smell are equally imperfect; for these wretched beings do not distinguish the qualities of sapid or odorous bodies. They roll themselves amidst the most filthy and fetid ordure, and devour the most disgusting substances; eating herbs, straw, linen, wool, tobacco and fecal matters. They drink either urine, or spring water. I have found in the stomach of an idiot, fragments of linen, which had once constituted a portion of his dress; in another case, the cecum was filled with straw, which had led to an inflammation and gangrene of the intestinal membranes. They devour indeed, whatever comes in their way.

An idiot to whom I had given some apricots, at first put them in her mouth and ate the pulp; being unable to bite through the stones, she swallowed them, as she had already done the pulp of the fruit. She thus ate nine apricots in succession, and would have eaten more had I not feared that she would have been sick. The touch, far from rectifying the other senses, or proving a substitute for them, is not sure. The arms of idiots are of unequal length, contracted and atrophied; the hands are deformed, distorted and small; the fingers are slender, crooked, maimed, or deprived of motion; and the skin is thick, rugose and insensible. Idiots extend the arms and hands in a vague and convulsive manner; lay hold of bodies awkwardly; are

unable to retain them, and permit them to escape from their hands. They walk awkwardly; waddling, or advancing by successive jerks; and are easily thrown to the earth. Some of them remain wherever they are placed. Those who walk, march about without an object, or without its being possible to guess what they propose to themselves.

The senses of idiots therefore, being scarcely developed, and the sensations imperfectly perceived, the understanding can make no greater proportionate advance, since its instruments are defective. Their senses, strangers to the external world, are incapable of exercising a corrective influence over each other; nor can education prove a substitute to so many disadvantages, as in the case of the blind and deaf and dumb, in whom the senses which remain, supply to a certain extent, those of which they are deprived. The ideas which man acquires by those senses, of which the blind and dumb are deprived, are doubtless wanting to them; but the understanding remaining unimpaired, although deprived of certain of its instruments, exercises itself altogether, in acquiring general notions and abstract ideas. The blind also, as well as mutes, whose powers of attention may be called forth by various means, so well pointed out by Doct. Itard, and so successfully applied to the education of the *Savage* of Aveyron,* are capable of receiving an education, while idiots are not.

Incapable of attention, idiots cannot control their senses. They hear, but do not understand; they see but do not regard. Having no ideas, and thinking not, they have nothing to desire; therefore have no need of signs, or of speech. It is indeed useless, to him who neither thinks nor desires. Moreover, we can judge of the degree of understanding which idiots possess, by the extent of their vocabulary. They utter certain imperfectly articulated sounds and cries, or prolonged bellowings, which they interrupt in order to separate the lips, as if they desired to laugh. If they do articulate certain words, they attach to them little sense. Some have only a cry, indicative of pain and pleasure. However, there are those who, like children, form by imitation and habit, a language of action, and even an articulate one; which is understood only by those who live with, and have charge of them. It expresses merely the first wants of life, and those instinctive appetites which they are, unaided, incapable of gratifying. Of what utility would language be to him who cannot think, and has nothing to communicate to his fellow beings? Idiots are mutes, because they have nothing to say. Those who have a language of action, employ only a small number of gestures, as signs of their instinctive wants. Do they act, every thing is wrongly done. We perceive the disorder, awkwardness, and slowness of their acts. The understanding remains as at birth, or at the period when the arrest of development took place. The digestive functions of idiots are usually very well accomplished; and they eat much and with voracity. With the female sex, menstruation is regular, and abundant. These wretched beings do not always testify a desire to eat; not seeming to be apprised of hunger, until they perceive food. Sometimes, in order to nourish them, it is necessary to convey the food to their mouth, and sometimes even to the fauces. Their secretions are involuntary, and are passed everywhere, and without shame.

Idiots do not always possess the instinctive faculties. They are below the brute; for animals possess the instinct of self-preservation and reproduction. Idiots do not possess this instinct, and have no sense of their existence. They have neither pain nor pleasure; hatred nor love. They are untimely births. They are monsters, and doomed, in consequence, to an immediate

* *The Education of a Savage*, Paris, 1807, in 8vo.—An account of the new developments of the Savage of Aveyron, Paris. 1807, in 8vo.

death, unless the tenderness of parents, or public commiseration preserve them. Yet, who would not be surprised at the facility which the major part of idiots possess, of singing, and remembering a variety of airs? Beside the examples which I have above related, I ought here to remark, that nearly all the idiot children, for whom I have been consulted, sing some certain air with more or less correctness; or at least, certain passages of music, although deprived of speech.

The habitudes of some idiots are very singular. They seem to be machines, set in motion in order to produce invariably the same movements. With them, habit takes the place of intelligence. An idiot who was twenty-three years of age when I saw him, of the usual stature, a slender person, forehead flattened, the complexion pale, the eyes crossed, articulation scarcely possible, and the dejections involuntary, was always accustomed to walk to the same place; sometimes enlivening his walk by bowing and rapidly raising the body; or by shaking one of his arms, and laughing loudly. If any one placed an obstacle across the path to which he was partial, he was both grieved and angry, until it had been removed. Never did he remove it himself.

Among the idiots of the Salpêtrière, there are several who are incapable of either dressing or feeding themselves. Their dejections are involuntary, and they remain almost naked; indifferent to the rain, cold, or heat of the sun. There is one who, as soon as she rises in the morning, sits down upon the end of the same bench, and there balances herself backwards and forwards; striking her shoulders violently against the wall. This balancing is continued and regular; being sometimes more rapid and vigorous than at others, and she then utters a stifled cry. Thus she passes her days and life; exposed to every atmospheric vicissitude, and a stranger to all external impressions. I found twenty years ago, in the hospital of Poitiers, extended upon the straw in the same apartment, two little idiots, one of whom constantly laughed, and the other wept. Idiots are strongly inclined to masturbation, and yield themselves to the excessive practice of it in the presence of any one, without either modesty or shame.

I once saw an idiot thirteen years of age, who had, ever since the age of seven, possessed all the signs of virility; the penis being very large, and the pubes covered with hair. He seemed to live, only to masturbate. Doct. Haindorf,—who published in German, twenty-five years ago, an excellent treatise on mental alienation,—relates a remarkable example of obstinacy, which displayed itself in the person of an idiot. Born in the mountains of Rawn, he was deprived of the power of speech, and brought to the hospital of St. Julien, Wurtzburg. He was permitted to wander about in the garden of this establishment, where he was seen, covered only with a linen garment. He was accustomed to amuse himself, in moving about in a circle, from within which, he would pluck up the grass, and collect stones, which he placed in a pile, and afterwards threw away. Thus he occupied himself, without either purpose or design; and during this exercise his muscles were convulsively contracted. If prevented from moving about, and piling up stones, he would begin to pull different parts of his body, and to scoop up the earth with his feet, which were naked, and covered with callosities. If put in a place of confinement, he became furious, and endeavored to set himself at liberty. So soon as he had obtained his freedom, he commenced his circular movements, and collecting stones. He ate and drank whatever was given him, and always returned to the same place, for his food and sleep. He was often accustomed to gnaw a bit of wood, and swallow what he could obtain in this way; but so soon as a word was spoken to him, in connection with a fixed look, he fled to conceal himself. The slightest noise terrified, and caused him to retire; but he would

soon return, to resume his habitual exercise. He gave no indication of practicing onanism. All his acts were similar, and repeated at fixed periods of the day. The features of his countenance were disordered, the lips projecting, the teeth of a dirty white, and the eye, half concealed beneath the lid, did not permit the pupil to be seen. The outline of his mouth, was towards the eyes. The physiognomy was destitute of expression, and the head, which was very small, presented a remarkable flattening of the vertex.

The insensibility of idiots is sometimes most remarkable, although enjoying the use of their senses. We have seen these wretched beings bite and lacerate themselves, and also tear out their hair. I have seen an idiot who, with her fingers and nails, had pierced through her cheek, play with a finger placed in the opening, and end by tearing it to the very commissure of the lips, without seeming to suffer. Some of them have had their feet frozen, without paying the least attention to it. An idiot, having become pregnant, is confined without the slightest suspicion of what has taken place; and desires to leave her bed, saying she is not sick. These wretched beings are reduced to such a degree of insensibility and brutishness, that they do not understand the cause of their pain, nor distinguish, whether it is internal or external. Their consciousness of self-existence is so slight, that they are not aware that a disordered portion of the system, at any time appertains to themselves, and many even mutilate themselves. When sick, they do not complain, but remain gathered up in bed, without manifesting the least suffering, or without being able to divine the cause or seat of the affection. They die even, without the power of aiding themselves. Their moral degradation, is in relation with their privation of physical sensibility.

An idiot, says Doct. Haindorf, who was kept in the hospital of Saltzburg, did not appear susceptible of any fear. They desired to make the trial, whether he would not be impressed by the sight of a man who, having simulated death, should rise again. With this intent, an attendant laid himself down upon a bench, enveloped in a sheet, and the idiot was ordered to watch the dead man. Perceiving that he moved, the idiot advised him to remain tranquil. Notwithstanding this advice, the pretended dead man arose; when the idiot seizes a hatchet, and at first, cuts off a foot, and without being deterred by the cries of the unfortunate person, decapitates him at a second blow; after which, he remains composedly by the dead body. When reproved for his conduct, he coldly replied: if the dead man had remained tranquil, I should have done nothing to him.

A lypemaniac desired to die, but was nevertheless unwilling to commit the act, because it was a crime; preferring to subject herself to the condemnation of death, by the commission of some capital offence. Being left on one occasion with an idiot, she persuaded the latter to permit her to cut off her head; an act which she accordingly performed. The means employed by the lypemaniac were of a character to furnish an opportunity for repentance, to any one but an idiot, and to protect herself even after the first essays had been made to effect this frightful design. Gall states, that an idiot, having slain two children of his brother, comes smiling, to relate to the wretched father what he has just done. Harder says, that an idiot cut the throat of a man, after having seen the same act performed upon a hog.

Each of the cases which I have just related, would furnish matter for much comment. From them all, I deduce the following propositions: Idiocy presents innumerable varieties, as it respects sensibility, and the intellectual and moral capacity. Some idiots possess aptitudes and inclinations; and almost all, even those who are deprived of the power of speech, sing, and retain a recollection of tunes. Though no constant and direct relation subsists, between the vice of organization, and the various degrees of sensibility and understanding among idiots; we must be convinced, that the more considera-

ble are the organic deformities, the more marked are the imperfections of sensibility and intelligence. No particular volume nor form of the head are peculiar to idiocy; notwithstanding, it is proper to observe, that the smallest heads appertain to the most degraded class of idiots. Although we meet with idiots having large heads, the forms of the heads are not, more than the volume, a rigorous index of the sensitive and intellectual capacity. Their capability of acquiring an education, though limited to the power of imitation, and the primary wants of instinctive life, is not a sufficient indication to characterize the principal varieties of idiocy, although Dr. F. Voisin may be of this opinion.* Speech, that essential attribute of man, which has been given him to express his thoughts; being the sign, most frequently in relation with the intellectual capacity of idiots, furnishes the character of the principal varieties of idiocy.

In the first degree of imbecility, speech is free and easy. In the second, it is less easy, and the vocabulary is more circumscribed. In the first degree of idiocy, properly so called, the idiot uses merely words and short phrases. Idiots of the second degree, articulate only monosyllables, or certain cries. Finally, in the third degree of idiocy, there is neither speech nor phrases; words nor monosyllables.

The causes of idiocy, which are almost invariably local and physical, prevent the development of the organs, and render them unfit for the manifestation of intelligence; thus differing from insanity, whose intellectual and moral causes, ordinarily super-excite the brain, exalt the sensations, and occasion permanent exhaustion. To the number of the physical and predisposing causes of idiocy, we must add the influence of the sun, water and air; the manner of living among mothers; hereditary predisposition; certain localities favorable to the development of scrofula; and mountainous countries, such as Scotland and Norway. There are more idiots in countries than cities. It is not unusual, that there are several idiots belonging to the same family. I knew two young gentlemen, sole heirs of a distinguished family, who were idiots. We have at the Salpêtrière, an idiot girl, whose mother had but three children; two daughters and a son; all of whom were idiots.

Sometimes also, in the same family, there is one idiot, and other children who are insane. I have known idiots become mothers, but have never known their children to become so. The exciting causes of idiocy are numerous. Lively moral affections on the part of mothers during gestation, has an influence upon the child in utero; and improper management during parturition may produce the same effect. The custom pointed out by Hippocrates, which certain matrons have of kneading in some sort, the heads of newly-born children, by wounding the brain, may occasion idiocy: also blows upon the head, whether from falling or otherwise. Convulsions, whatever may be their cause, and also epilepsy, provoke this affection. Sometimes a single convulsion, or attack of epilepsy, is sufficient to arrest the development of the organs, and the ulterior progress of the understanding, in a child who, until that period, had appeared highly intellectual. Acute and chronic hydrocephalus, also produces fatal effects; and a cerebral fever or meningitis which occurred in infancy, has occasioned idiocy. The effects of these causes are noticed from the period of birth, and produce the congenital form of idiocy. Children belonging to this class, have heads, either very small or large, and the features of the countenance are imperfectly delineated. They take the breast with difficulty, nurse poorly, do not gain strength, and it is long before their eyes, (which are crossed,) follow the light. They are lean, pale, and do not walk before the age of from five to seven years, and sometimes, not before puberty. They are in-

* Application of the Physiology of the Brain, to the study of children who require a special education: Paris, 1830, in 8vo.

capable of learning to speak, or acquire only certain words, or syllables, and this, at a comparatively late period of life.

Children are sometimes born in a state of perfect health, and grow, at the same time that their understanding develops itself; but possess an unusual degree of susceptibility; are lively, irritable, choleric; of a brilliant imagination, a well developed understanding, and an active mind. This activity, not being in relation with the physical forces, they exercise and speedily exhaust themselves. Their understanding remains stationary; making no farther advances; and the hopes, which were recently raised so high, are dashed forever. This is accidental, or acquired idiocy. Sometimes also, an accidental cause arrests the development of the organs and intelligence.

The crania of idiots ordinarily present vices of conformation. Both the volume and form of the cranium among idiots, offer as many varieties, as do the crania of sound men. There is indeed, no form proper to idiocy. A head too small or too large, in proportion to the height of the body, may be that of an imbecile or idiot. The same is true of a regular, as well as of a deformed head. The numerous researches that have been made with respect to the conformation of the head, had for their object its volume, the form of the cranium, and the features of the countenance. Hippocrates had pointed out the too small head,—which he calls microcephalon,—as one of the causes of idiocy. Willis has described the brain of an idiot, which had not half the usual volume. Brown, at Amsterdam, has in his possession a similar cerebrum, and several crania of microcephala. Pinel has given an account of the cranium of an idiot, which was remarkable for its imperfect conformation, and also that of one who could scarcely be said to have a cranium, while the face was very fully developed. M. Richerand in his physiology, cites several examples of crania, which were very slightly developed. Gall has figured* two very small crania, and limits intelligence to crania which are only from 14 to 17 inches in circumference.

Vésale pretends that the heads of the Germans are flattened posteriorly, in consequence of a custom of theirs which requires that their children should sleep upon the back; and gives a sketch of the cranium of an idiot, whose occiput is very much flattened. Prochaska, Malacarne and Ackerman, have given descriptions of the crania and brains of idiots, which differ much from each other.

According to Cuvier, the relations of the cranium to the face, indicate the degree of intelligence among both animals and man. A small cranium and large face, are indicative of an inferior degree of intelligence. Pinel has applied the calculations of geometry to the appreciation of the cranial capacity. He has pointed out, as peculiar to idiots, a flattened cranium, and a want of symmetry between the right and left portions of it. In the case of one idiot, the height of the head was only one tenth part of the structure of the individual. May not these vices of conformation, this defective development of the cranium be attributed with propriety, to rachitis and scrofula, so frequent among idiots?

Those suffering from hydrocephalus, are not all deprived of understanding; but the cases which I have related, prove that idiots are often hydrocephalic, although their crania may be small. These idiots are rachitic, and their limbs atrophied, deformed and contracted. I have a large number of the busts and heads of idiots, cast after death. In general, the summit of the cranium is elliptical, the diameter of the fronto-occipital region is extended, and the parietal flattened, towards the temporal suture. This circumstance, which renders the foreheads of certain idiots almost pointed, the flattening of the

* *Anatomy and Physiology of the Nervous System.*

occipital and coronal regions, and the inequality of the right and left portions of the cranial cavity, are phenomena the most constant, and perhaps most worthy of attention, on the part of those who desire explications.

There was brought to the Salpêtrière Dec. 15, 1815, one who had been an imbecile from birth, who was in the habit of begging, and was maltreated and violated, in 1813, by foreign soldiers. Though of medium stature, she appeared small, in consequence of a curvature of the spine, from which a protuberance projected upon the left haunch. The head is voluminous, the face long, large, and, as it were, flattened, and the forehead upright. The hair is abundant, and of a chestnut color; the eyes of a chestnut color, and sometimes crossed; the mouth is large, and seems to be square when open; the teeth are carious, and the gums fungous; the palatine arch forms a reëntering angle, at the point of union of the maxillary bones, and the *velum palati* is bifurcated. The head, measured upon the plaster cast taken after death, gives the following proportions:

Circumference	21.06 in.
Fronto-occipital curvature . . .	12.71 "
Antero-posterior diameter . . .	6.57 "
Bi-temporal diameter	6.37 "
Total	46.71

This singular head exceeds considerably the usual size of well formed heads. The face is 6.10 inches in length, and the antero-posterior exceeds the bi-temporal diameter, by only .19 of an inch. The forehead is 2.75 inches high, and from one orbital apophysis to the other, is 5.11 inches. The face is flattened, and the occipital region narrow, compared with the coronal. The hands of this imbecile, as well as her feet, present an extraordinary conformation, with respect to their length. The fingers approximate at their extremities, and are united by the skin. The nails touch, and are always distinct. We distinguish beneath the skin, five fingers on the right, and six on the left hand. So closely are they confined one to the other, that they cannot be bent, nor separated. The feet present the same vice of conformation. Notwithstanding this faulty condition, she can, though imperfectly, spin, handle the needle, fasten a pin, and untie a knot. Though of a very limited understanding, she recognizes those who serve her, regards the calls of nature, eats well, sleeps, and her menstruation is regular. She left her father with indifference, nor does she ever speak of him. She regards men with satisfaction, has no sense of shame, and is very covetous. By showing her some pieces of money, she may be induced to do whatever any one desires. She often calls for jewelry and ear-rings; always in order to be married on the following day. She articulates certain words with difficulty, but vivacity; is choleric, but timid; and laughs and weeps, at the slightest occurrence. She died one year after her admission, of a verminous affection. I found 73 lumbricoid worms in the digestive canal, and even in the œsophagus.

M. Foville,* physician to the Asylum for the insane at Rouen, in an essay full of interest, points out a vice of conformation in the cranium, which he has often witnessed in that hospital. He has observed a circular depression of the head, which, passing from the forehead over the temporal regions, extends around, below the occipital protuberance. This is a consequence of the compression of a fillet, placed upon the forehead of children, and maintained in its position by strings, which confine unduly, this portion of the head. Inter-

* *Deformity of the Cranium*, Paris, 1834, in 8vo.

fering thus with the regular development of the cranium, it deforms, and renders very prominent, the occipital region, while the forehead is very much flattened. This defect is observed in the south of France, and must necessarily impair the development of the understanding.

In the interesting researches of Dr. Parchappe,*—physician to the Asylum for the insane at Rouen,—he compares the volume and form of the cranium, modified by stature, age, sex, the physiological and pathological condition of the understanding, with the mass and volume of the encephalon; and concludes that if there exists a general relation between these two terms, facts are wanting to deduce rigorously from this relation, the different degrees of intellectual and moral capacity. Dr. Lelut, physician to the Salpêtrière, who has published such interesting essays, respecting mental alienation, has also made some researches, respecting the relative volume and form of the cranium, in the healthy man and the idiot. He is of the opinion, that the cranium of the latter is a little less developed; but that this difference is not so great as it appears, and has been represented to be, since the time of the ancient writers. According to this author, the more the volume of the cranium lessens, the nearer do we reach the lowest degree of idiocy. The frontal portion of the cranium of idiots is, in fact, as large and expansive as that of men in general; and indeed, the dimensions of their crania are as great as those of other men. How much labor is still necessary, and what careful and extended research, before we shall be able to establish, with precision, the coincidence, in volume and form of the brain, with the intellectual capacity.

With each case of idiocy which I have published in this chapter, I have also given the admeasurements of the head, taken during life. By bringing them together, we may compare the means, with the results obtained by my young confrères: time will not permit me to do it. For those who are fond of this kind of investigations, I subjoin a table of the mean results of admeasurements of the head, taken from women in the enjoyment of good health, and from plaster casts, taken after death, in the case of 36 insane women, 17 imbeciles, and 17 idiots. In the case of three idiots, whose heads were very small, the admeasurements were taken from the crania.

TABLE OF CRANIAL ADMEASUREMENTS.

	Circumference.	Antero-posterior curvature.	Antero-posterior diameter.	Transverse diameter.	Totals.
Women in a state of health	21.87 in.	13.30 in.	6.98 in.	5.29 in.	47.44 in.
Insane	20.82	11.50	6.96	5.67	44.95
Imbeciles	20.19	11.49	6.69	5.63	44.
Idiots	19.92	11.26	6.85	5.39	43.42
Idiots microcephalous.	15.07	7.51	4.88	4.17	31.63

From this table, we learn 1st; that the circumference of the head, according to admeasurements, taken from among women enjoying the use of their reason; from insane women, imbeciles and idiots; diminishes in an almost equal proportion, from the woman in the enjoyment of usual health, to the

* *Researches on the Encephalon*, Paris, 1836, in 8vo.

idiot deprived even of instinct. 2d. That the fronto-occipital curvature diminishes in a remarkable degree, from the woman of sound mind, to the insane female; whilst no variation is noticed from the insane person to the imbecile, and a difference of but six millimetres between the latter and idiocy. 3d. That the fronto-occipital diameter is the same in the case of the woman enjoying the use of her reason, and the insane woman; and that there is a diminution of but six millimetres, between the insane person and idiot; while the difference is enormous, on passing to the lowest degree of idiocy. 4th. That the bi-temporal diameter is more considerable in the case of the insane woman, and even the imbecile and idiot, than in that of the woman possessing the ordinary degree of intelligence. 5th. That if we suppose, that the sum of these four admeasurements, express the volume of the brain; it follows that the volume of this organ, diminishing in the same proportion with the intellectual capacity; that of the cranium, would be the expression of this capacity.

Morgagni found the brain very dense: Meckel says that the cerebral substance of idiots, is more dry, light and friable, than that of persons in the enjoyment of a sound mind. Malacarne assures us, that the convolutions of the brain are numerous, in proportion to the intelligence, and that the plates or lamellæ of the cerebellum, are least numerous among those who are deprived of understanding. The convolutions are small, atrophied, compact and shallow. Perhaps the capacity of the lateral sinuses of the cerebellum have been neglected. I have found, in nearly every idiot whose body I have examined, the lateral ventricles much confined, and of very limited capacity. The physiognomy of imbeciles and idiots is very peculiar, so that they are recognized as soon as seen. Lavater says, that the receding forehead, whose curvature is spheroidal; the large, prominent and open lips, whose commissures are widely separated; and the chin projecting forward, or retreating, indicate idiocy. Camper, who sought in the facial angle only a characteristic of the beauty of the face, fixes at ninety degrees, the extreme limit of this angle. There are, however, idiots, whose facial angle is more than this; and very sensible persons, in whom it does not measure eighty degrees.

It will be observed, that I have nothing to say, respecting the treatment of a constitutional condition. Nevertheless, we may, to a certain extent, ameliorate the lot of imbeciles, by giving a proper direction to their habits and actions; as well as by accustoming them to some labor, that shall turn to the profit of the poor, or serve as a means of diversion to the rich. Idiots require very careful and assiduous domestic attentions.

[By the politeness of Lewis Weld, Esq., Principal of the Asylum for the deaf and dumb, at Hartford, Conn., who has recently visited several of the Institutions in Europe designed for this interesting class of our fellow-beings,—and who is expected, at no distant day to make a report of this visit,—I have been favored with the following particulars respecting a class of imbeciles and idiots, twelve in number, who are enjoying the philanthropic instructions of M. Sægert, himself the superintendent of an institution for mutes, at Berlin, Prussia. At the commencement of their pupilage, says Mr. Weld, a small number only could speak intelligibly, some were unable to walk, few were capable of attending to the primary necessities of life, and all required the attentions of very young children. M. Sægert has had one of these wretched beings under his care for the space of two years, two for one and a half years each,—both of whom are deaf and dumb,—the period during which the remaining ones had been under instruction, varying from five months to two weeks; a single individual having been admitted at the last named period. Their ages varied from eight to twenty years. Their improvement has been regarded as decidedly encouraging. They are now able to dress and undress themselves, wash their faces and hands, walk about, partake of their food with propriety, etc., etc.

Their occupations, calculated to develop and exercise the mind, are principally drawing, writing, and knitting. Some sing a little; others dance. In drawing, they not unfrequently seem, on meeting with a comparatively difficult point, to pause, and after a time proceed with their work, as if by a process of reasoning they had been enabled to surmount the difficulty. They also submit understandingly, to restraint and the discipline of the house. Besides the physiognomy characteristic of idiocy, I am informed, that with most of them, the head is mal-formed. The hygienic means employed by M. S. are limited to diet and exercise. In addition to his own observations and carefully formed opinions, he has consulted every author of authority who has treated of the subject of idiocy, and—I am happy to be able to state—is soon to publish the results of his experience. M. Guggenbuhl of Abendburg, Switzerland, has a school for cretins, and employs medical, as well as other measures of relief and improvement. He has fourteen or fifteen pupils under his care, and receives them at the early age of five years. M. Seguin, of Paris, has also a school for the instruction of idiots. Mr. Weld did not however, visit either of the latter institutions. Upon the statement just made, which is not only exceedingly brief,—barely sufficient to direct the minds of medical men to the subject to which it refers,—but containing few of the data upon which an intelligent opinion could be formed, it might seem invidious to comment, did not our remarks accord with the sentiments expressed, and the hopes entertained by the benevolent men who have undertaken this work. It certainly is a thankless office, and would indeed seem to be the offspring of a disingenuous and uncharitable spirit, to do otherwise than bid "God speed" to efforts which have for their object the amelioration of the physical condition, and the elevation in the scale of intelligence, of any class, however degraded, of our fellow men. We have however learned from some degree of observation, and in common with others from personal experience also, that time, talent and labor, may all be so expended, as virtually to be thrown away. It therefore becomes a duty, at the same time that we witness new proofs of a growing benevolence, and find the active charities of man opening new fields of philanthropic effort, to enquire what fruits may be fairly anticipated as a reward; scanning with the eye of reason as well as philanthropy, the means pursued as well as the ends contemplated, by the various benevolent schemes and enterprises, that almost daily demand our notice and approval. The doctrine of perpetual motion has ever found advocates and believers, notwithstanding the demonstrable impossibility of effecting the object contemplated thereby; and not a few have wasted months and years of their lives, and not a little bewildered their brains, by their attempts to compass this impossibility. So also, the navigating the air by means of balloons, has been attempted by misguided men, who, having made clear to their own minds, some one of the many elements which must concur to secure its practicability, have engaged in a ruinous enterprise, for want of a clear appreciation of all the conditions of the problem. With reference to the undertaking more particularly before us, we have reason to believe that the gentlemen who are experimenting upon the mind of the idiot, are proceeding cautiously and intelligently in their work; are making it collateral to other occupations of known and acknowledged importance, and are wasting neither their talents nor resources, nor in any respect compromising the present or future well-being of the unhappy subjects of their experiments. For these, in addition to other considerations offered, we should hesitate before expressing an opinion with regard to the results of their labors, and leave it for time to make them manifest.]

Without imitating that species of worship, which they are in the habit of paying to idiots and cretins in certain countries, where it is regarded as a special favor of heaven, to have an idiot or cretin in one's family; we should treat with much care, those wretched beings who, left to themselves, are exposed to all the causes of destruction. We habituate them, in time, to a suitable regi-

men; but their indolence, apathy, and resistance to every movement which only augment their slovenliness, together with their propensity to onanism, require an enlightened, and very active watchfulness. Nothing could have prevented imbecility and idiocy; but authors who have written on cretinism, particularly Fodéré, offer most important advice respecting the propagation of this last infirmity.

Both cretins, cagots, and even albinos, have been classed among idiots. Cretinism is a remarkable variety of idiocy. Cretins are idiots of the mountains, though they are sometimes found in the plains. They do not differ essentially from our idiots, with respect to the feebleness of their sensibility and intellectual capacity; but in the symptoms and circumstances peculiar to cretinism. We denominate cretins, those idiots and imbeciles who ordinarily inhabit the gorges of mountains. This name is derived, it is said, from the word chrétien, because these wretched beings, simple and inoffensive in their manners and habits, were venerated as holy personages. Permit me to hazard an hypothesis. Did not the appellation cretin come from the word *crétine*, which in an earlier age, signified alluvion? Has not this name been transferred to individuals who have become enfeebled, in consequence of living in the midst of an alluvial region? In fact, is not cretinism endemic in gorges of the mountains, which are more or less marshy, and exposed to a moist air? M. de Maugiron, of the Society of Sciences at Lyons, is the first who noticed with special attention this unfortunate class, and wrote an essay on cretinism. M. de Saussure,* in his journey to the Alps, speaks at length of cretins, and the causes of their infirmities.

Richard Clayton† assures us, that cretins are rarely more than four feet two inches in height, that the greater part of them are deaf and dumb, and that they become old at a comparatively early period of life. Clayton, doubtless speaks only of cretins who are reduced to the lowest degree of mental and physical degradation. L. Ramond‡ has described the cretins of the Pyrenees, compared them with those of the Alps, and demonstrated that the causes which are said to produce cretinism in the Alps, do not exist in the Pyrenees. William Cox§ has pointed out the different degrees of degradation with respect to intelligence, which exist among cretins; from that which borders upon a normal state, to that in which the cretin becomes a mere organized being that vegetates. Fodéré|| has published an excellent work on the cretins of the Alps, whom he had long seen, and carefully observed. Parr, in his researches among the Americans, remarks, that he saw many cretins and albinos at the Isthmus of Panama. Cretins present the same characteristics, the same varieties of intellectual incapacity, and of physicial and moral insensibility, which we observe among idiots. They are however, distinguished from the latter, inasmuch as they are born usually, in the gorges of mountains, and amidst local and material circumstances, which are not met with elsewhere; and because they display goitres more or less voluminous; and are all remarkably lymphatic and scrofulous.

The stature of cretins is small, and their skin pale, wan, livid, flaccid and wrinkled. Their muscles are soft, relaxed, and without strength; their limbs large and thick. The abdomen is very voluminous. The head is usually gross, now flattened posteriorly, and now depressed at the top. The hair is fine, and of a blond color. The eyes are widely separated, and concealed be-

* *Travels among the Alps.*

† *Memoirs of the Literary and Philosophical Society of Manchester.*

‡ *Journey to the Pyrenees.*

§ *Letters on the Civil, Political, and Natural Condition of the Swiss.* Paris, 1782, 2 vols. in 8vo.

|| *A Treatise on Goitre and Cretinism.* Paris, year viii. in 8vo.

neath bushy eye-brows; the lids are red and weeping; the look askance and stupid; the nose is flattened, and the lips are thick. The tongue is pendant, and the mouth, half open, overflows with mucus, which runs down, over their garments. The lower jaw is prolonged, and the face swollen, which causes it to appear square; and the physiognomy without expression, is stupid. With some cretins, the neck is short and thick; while in other cases, it is long and slender. All are not afflicted with goitre. For the most part, the lower extremities are unequal, short, and infiltrated; and the step is slow, awkward and insecure. They are slovenly in the extreme. Furthermore, the digestive functions are well executed. Cretins are gluttons, and also very lascivious. Like idiots, they may be distributed into three classes. Cretins of the first class, hold the head properly, have an animated look, and an easy gait. Their ideas are few, and incomplete; but they distinguish between the most common affairs of life, as well as good and evil. They are incapable of following a process of reasoning, ask few questions, and reply correctly. Their speech however, is interrupted by grimaces, and convulsive muscular movements. This constitutes the most numerous class of cretins.

Cretins of the second class, have a livid skin, deformed features, a long neck, soft and flaccid flesh. They are goitrous, their heads imperfectly formed, and their limbs large and heavy. They express themselves by gestures only, or by convulsive cries, have little sensibility, experience and express merely their physical wants. Their understanding goes no farther than a gross instinct, and they become attached to no one. In the third class, the cretins are mute, deaf, or blind; the look indicating, that at best, they see imperfectly. They possess no sense of taste, but eat whatever is put into their mouth. They are equally insensible, to good or bad treatment. It is necessary to carry them about, as their dullness and stupidity are most profound. All infants who become cretins, are not born such. It is only about the second, third or fourth year, that the development of the understanding is arrested. However, children who are to become cretins, are born with a small goitre, nurse with difficulty, are bloated and always drowsy. They neither walk nor speak, at the same age with other children. It is not until the age of ten or twelve years, that they are able to walk, speak a few words, and convey their food to their mouth. Puberty is late. These wretched beings are found seated, ordinarily before their respective habitations. To go from their bed to the common fire-place in winter, and outside of the door in summer, is, for them, a long journey, as they walk little. It would be desirable to be able to compare the different forms of the crania of cretins, with those of the idiots inhabiting the plains and cities. I have been unable to obtain more than a single specimen of the crania of cretins, although I have sought for them in the Pyrenees and Alps, and several physicians have promised them to me. The prejudices of the country, have doubtless proved an insurmountable obstacle to the fulfillment of the promises of my confrères.

[I have recently examined the skull of a cretin, belonging to my friend, Dr. H. A. Grant, of Hartford, Ct. The Doctor informs me, that while *en route* from Martigny to Mont St. Bernard, he accidentally paused in the neighborhood of a church-yard. He entered it, and while walking about among the tombs, happened to glance at the church which was a little way off, and observed in a niche, something resembling the skull of a human being. On inquiring of his conductor, who was acquainted in those parts, what it was, and why it had been placed there, he was told that it was the skull of a cretin boy, from eight to ten years of age, who, in consequence of his perverse disposition, and acts of cruelty and murder—for he had actually killed his own mother—had been decapitated after death, and his head placed where it then was, as a terror to all evil doers belonging

to this class. A plate of glass once stood before it, but this had long since been broken, and the naked skull stood bleaching beneath the sun and winds of heaven. Without expressing much interest in this statement at the time, Doctor G. resolved, if possible, to possess himself of it. On his return a few days subsequently, he halted again at this sequestered spot, and sending his servants in an opposite direction, availed himself of the opportunity to despoil the church of this singular relic. So long had it been exposed, that the sutures easily separated, and it was readily deposited beneath the folds of his cloak. This skull is of the usual thickness and density. The bones of the face are unusually small, while the breadth across the root of the nose from the internal canthus of one eye to that of the other, is nearly two inches. The head is singularly shaped; the anterior portion being low and narrow, while its breadth across from one parietal protuberance to the other, is, in contrast, remarkably large. The vertex is also very flat; rising little if any, above the low forehead. The occipital bone has unfortunately been misplaced or lost. In other respects the skull is entire. In proof of the fact that the age of the child was correctly given, it will be proper to observe, that the second teeth had not all been cut at the time of his death; several now being exposed to view, by the decay of the integument and alveolar processes. We took the admeasurements of the skull, with a view, at the same time that we furnished an idea of its size, to present also, the striking contrast which exists between the parietal and frontal portions.

Circumference of skull	19.25 inches
From root of nose to occipital protuberance, about . .	10.00 "
From mastoid process of one side to the same on the other, over parietal protuberances	15.12 "
From junction of frontal with parietal bone, from side to side just below parietal protuberances . . .	12.87 "
From corresponding points over frontal bone . .	6.50 "

A family of the Pyrenees is thus described. The physiognomy of the mother contrasts singularly with that of her two children; the goitrous enlargements of the latter, particularly that of the young man, being much less voluminous than that of the mother. The forehead of the young man is far more retreating than that of his sister. The eyes of both are concealed beneath the orbit, and the chin is also very retreating. The lips of both, and particularly those of the daughter, project, and the mouth remains partially open. Their physiognomy is expressive of the most perfect stupidity. They do not speak, but utter a sort of grunt. They walk insecurely and slowly; help themselves to food; but require assistance in dressing. They employed certain signs to express their desires, which were limited to the first wants of life. They recognized their mother, and loved to be near her. Rarely did one move abroad without the other; and in the house, they were always accustomed to sit side by side. The daughter was sent to the hospital at Toulouse, where I saw her in 1828. She was of medium stature; her head small, and flattened at its crown; the eyes small, and concealed beneath the orbit; the lips thick, the mouth gaping, and filled with mucus. Two small goitres were appended to her chin. She walked awkwardly, and with a waddling gait. She did not speak, but uttered a grave, deep sound, to express her joy, as well as suffering. She had a well marked taste for strong substances, and seized upon tobacco with avidity. She appeared gratified when I gave it to her, and conveyed it immediately to her nose. I gave her some pieces of money; she took them in her hand, looked at them attentively, and expressed her recognition of them, by uttering certain stifled and articulate sounds. She has since died, and M. Delaye, physician-in-chief of the hospital of Toulouse, sent me her cranium,

the dimensions of which are as follows. The left half of the cranium is more prominent than the right:

Circumference	20.07 in.
Curvature from the root of the nose to the occipital tuberosity	9.64 "
Antero-posterior diameter	6.61 "
Bi-temporal diameter	5.70 "
Total	42.02

I have remarked, that cretinism is endemic in the gorges of mountains, and in certain plains. We meet with cretins among the Alps, the Pyrenees, the Asturias, in Scotland, among the Krapack or Carpathian mountains, in Tartary, among the Cordilleras, etc., etc. Cretins are far more numerous in countries where cretinism is endemic, than are idiots in the plains and cities. Cretins are so numerous in these countries, that in the department of the Alps alone, there were 3,000 cretins in 1812,—according to a memorial from which I shall borrow much,—while idiocy is a rare phenomenon among us. In fact, in hospitals for the insane, only one thirtieth at most, are idiots. In the general table of the insane admitted at the Salpêtrière, during four years, within three months, and published by Pinel, we find that out of 1,002 insane women who were admitted, only 36 were idiots. The reports of the same hospital, from the year 1804 to 1814, out of 2,804 insane women, present 98 cases of idiocy.* The same is true at the Bicêtre. According to an unpublished memorial of Pussin, as well as the reports made by Doct. Hébréard, physician to this hospital, and the reports published by Count Pastoret in 1816,† out of 2,154 insane men admitted at the Bicêtre during ten years, 69 were idiots.

The examination of these reports, justifies what I remarked above, when announcing that idiocy is a rare phenomenon among us; since, out of 7,950 insane persons of both sexes, there are only 203 idiots. Pinel says, that one quarter of the inmates of the Bicêtre and Salpêtrière, are idiots. This is evidently an error in compiling, since the statistical tables of the same work show the contrary. Reil, and others who have written since the celebrated French professor, have repeated the same error. The vague acceptation of the word idiotism, explains this apparent contradiction between what has been advanced by these distinguished masters, and the results of observation. Those authors, who have observed cretins, and written on the subject of cretinism, have expressed different, and often conflicting opinions, respecting the causes of this infirmity. We meet with cretins in low, deep and narrow valleys, and in gorges surrounded by high mountains.

A celebrated Italian traveler, whose name has escaped me, assures us, that cretins are far less numerous, in the gorges of magnesian, than calcarious mountains. Saussure has observed that there are no cretins found above an elevation of 600 toises‡ (3,600 feet). He does not concur in opinion, with those authors who believe that snow-water or melted ice, and waters containing calcarious sulphates, are the cause of cretinism. The inhabitants of high mountains, he says, drink the same waters and are not goitrous. This savant attaches little importance to marshy emanations, to bad nourishment, to drunkenness and debauchery, as a cause of this infirmity, because the effects of these influences are not perceived among the inhabitants of the plains. He attributes cretinism, to the stagnant, heated and vitiated air,

* *Report to the general Council of Hospitals.* Paris, 1816, in 4to.
† *Treatise on Mental Alienation.* Paris, 1809, in 8vo. p. 186
‡ A toise is two *yards.*

which the inhabitants of the valleys respire; for, adds he, villages having a southern exposure, contain the largest number of cretins. The cretins of the Pyrenees, which were observed by Ramond, inhabit valleys having a northern exposure, respire a dry and temperate air, and drink pure and running water. It is therefore to other causes than those indicated by Saussure, that we are to attribute cretinism. Sloth and supineness can with no more propriety, be charged with it. The inhabitants of Bearn and Navarre, though very active, are nevertheless subject to goitre and cretinism. Can we however, convince ourselves with Ramond, that misery, and the state of abasement and contempt of which cretins are the objects, may have gradually produced the cretinism of the inhabitants of the Pyrenees? Certainly not. The cretins of the Valais, are regarded with a kind of consideration in addition to numerous affectionate attentions, and are not miserable.

Fodéré does not admit, that the waters which are drank by the inhabitants of the valleys of the Alps, are the cause of cretinism, the inhabitants of high mountains having no other waters to drink. This learned professor is of opinion, that cretinism is produced by the warm, humid, concentrated and stagnant air, which is respired in the gorges. In an unpublished memoir which Count Rambuteau sent to the minister of the interior in 1812,—a memoir which I have freely laid under contribution,—the aged prefect of the Simplon expresses the belief, that the Rhone, overflowing at the period when the snows melt, leaves in the plains of the Valais, marshy waters, which exhale impure vapors; and that the waters, in descending from the summits of the mountains, are charged with the muriate and carbonate of lime, which render them unhealthy. These are not the only circumstances however, which contribute to the production of cretinism. He rejects the opinion of those who attribute it to waters, produced from ice and melted snows. In the Valais even, says M. Rambuteau, the habitations which are situated on high mountains, where they breathe a pure and free air, present to our notice a robust population.

In the valley of the Rhone, many of the more extended portions of it, are exempt from goitres and cretinism, where the air is well agitated, and throughout the greater part of the lateral valleys, where they receive the refreshing winds from the north; when removed from marshes, and water of a good quality is drank. Cretins on the contrary, are most numerous in villages situated in valleys, encompassed by high mountains, and exposed, during four months, to the rays of a burning sun. The heat, reflected from the naked and scorching rocks, is so concentrated, that the inhabitants respire only a stifling and heated air, and the south wind, especially referred to by Hippocrates, for its depressing effect upon the process of innervation, prevails there constantly.

It is remarkable, that the valleys in which goitrous persons only are found, border on those in which cretins reside; and that in approaching the latter, goitres begin to appear; at first rare, then more frequent. At length, we see them both existing together. The habitations of the Valais are low, narrow and filthy. The air in them is not renewed, nor does the light penetrate them. The domestic animals live there, in company with human beings. The food of the latter is bad, and composed of salted meats, potatoes, maize and chestnuts. The indolence, sloth, drunkenness and debauchery; the insufficient attention which is paid to new-born children, and the accidents which happen in consequence of their abandonment; are all secondary, but powerful causes, which augment the fatal influences of the sun, water and air.

To all these denials of the injurious influence of the waters, Dr. Bailly opposes the contrary results of his observations. Goitre or bronchocele proceeds, says this physician, from uncleanly and hard waters, which run, sheltered from the sun, and the action of the air, as do those which flow from the crevices of

rocks, from mountains, or the bowels of the earth, and which are drank shortly after they appear. It is true, adds our confrère, that goitre is produced from the quality of the water, and not from the condition of the atmosphere; and that there are springs in the Leman, the use of whose waters for eight days only, produces or augments this tumor. Those persons in the same village, who do not drink of the water of these springs, are in no respect affected with goitre, and do not become idiots, although living within gun-shot of the other inhabitants. M. Vyn, in his excellent itinerary in Switzerland, discusses the various opinions that have been promulgated respecting the causes of cretinism, and expresses his dissatisfaction with them all. He is of the opinion, that this infirmity is produced by the sudden and frequent transition from a warm to a cold temperature. This is produced by very cold currents of air, which escape from narrow gorges, and from the great reduction of temperature after sunset, in comparison with its elevation during the day.

The immediate organic causes of cretinism, are no better known nor determined, than are the predisposing and remote. Thus, one attributes it to the smallness of the head among cretins, and the flattening of the vertex and occipital region. Malacarne contends, that the small size of the cranium, or rather its narrowness, does not permit the brain to become developed; and hence it is incapable of fulfilling its functions. Ackermann concluded, that the flattening of the occipital region, noticed among many cretins, by displacing the bundles of nerves at their origin, impaired their action, and consequently the development of the understanding. Some observers have found the brain very dense, and others, hydrocephalic. Some authors attribute cretinism to the compression of the carotids, produced by the submaxillary glands which had been very much developed by scrofula. Is cretinism the result of a congenital vice? Is the deformity of the cranium always the cause of this infirmity, or rather is it not often a malady acquired after birth? Josias Simler, —an historian of the Valais, who wrote in 1574,—pretends that the midwives of his time, knew, at the moment of birth, whether the infant was to be a cretin. If such was the fact, cretins were born with some appreciable vice of conformation; after which, the dwelling in valleys which were humid and warm, the state of the atmosphere, the quality of the waters, and bad regimen, exercised only a secondary influence.

But M. Rambuteau assures us, that it is very rare that we can decide at birth, whether the infant is to be a cretin; and besides, how are we to explain the improvement which the inhabitants of the valleys experience, on changing their residence to high mountains, or the marked diminution observed for many years in the number of cretins? It is the more probable supposition, that the influences to which infants are subjected, are the producing cause of this malady; for, as we have already said, children are not born cretins, nor do they become so, previous to the second, and sometimes the fourth or fifth year. Another interesting problem to solve is the following: Do cretinism and goitre depend essentially upon the same causes? Since the major part of cretins are goitrous, some observers have decided the question in the affirmative. However, there are facts that ought to inspire doubts respecting this identity of origin. Cretins spring from goitrous parents, though this is not always the case; and it is not unusual to see in the same family, infant cretins, and children whose understandings are fully developed, though they are the offspring of the same father and mother. It is not always the case, that cretins are found where goitre exists; and reciprocally, where there are idiots, cretins are not always found. Thus goitre does not necessarily influence the development of the organs and intellectual faculties, but is complicated with idiocy in certain countries.

It is a constant observation, says M. Rambuteau, that cretins who are married to persons exempt from cretinism, give birth to children, sound both in

body and mind; while individuals who are well formed and intelligent, beget cretins. We cannot say what would be the result of a marriage between two cretins, as such unions never take place. It is notorious, that both fathers and mothers who stammer, (a very common occurrence in the Valais), often give birth to idiots; and that in families where the first born is an idiot, the younger children are equally so. It has also been observed, that the Valaisannes, who marry French or Savoyard refugees, are more likely to produce cretins, than when they are allied to the people of the country. We can account for this phenomenon, by calling to mind the fact, that the French and Savoyards who take refuge in the Valais, are men without principle, education or resources; who are enervated by the excessive heat of the valleys, by drunkenness and debauchery; who become apathetic and besotted, and who,—marrying before becoming acclimated,—produce feeble and scrofulous children, subject to the fatal influences, of all the causes which favor the production of goitre and cretinism; whilst the Valaisannes, who are connected by marriage with Frenchmen belonging to the higher classes, and in easy circumstances, give birth, as do the inhabitants of the lofty mountains, to strong and robust children.

Whatever may be the remote and proximate causes of cretinism, it is consoling to know, that the number of cretins has been diminishing in the Alps and Pyrenees for the last forty years. The late prefect of the Simplon, attributed this diminution to the dykes, which prevent the inundations of the Rhone; to the drying up of the marshes; to the grubbing up of the soil; and finally, to the improved regimen adopted by the inhabitants of the Alps, who have become more industrious, and less addicted to crapulence and drunkenness. Fodéré assures us, that the care which is taken to rear the children upon high mountains, that industry, commerce, and the use of coffee, have powerfully contributed to lessen the number of this unfortunate class of our fellow-beings. Ramond agrees in sentiment with these authors, as it respects the diminution of cretinism. Perhaps we ought also to attribute something to the influence of the light that has, at length, penetrated these countries. The prejudices and superstitious regard which they entertain for these unhappy beings, the mistaken attentions which they lavished upon them, contributed to render indolent, apathetic and stupid—cretins in a word—those unfortunate beings who, at this day, without being deprived of the cares which are due to those who are deformed by nature, are reared with a greater share of discretion.

We denominate *albinos*, those persons who, accidentally, and in consequence of a malady ordinarily congenital, have a milk-white skin, the hair of the head and person of a shining whiteness, and rose-colored eyes. The skin of albinos is pale, of a milk-white color, and covered with a white down; the hair of the head, eyelids, eyebrows, beard, and that of the other parts of the body, being of a shining white. The cornea, deprived of the pigmentum, leaves exposed to view, the blood-vessels which traverse the eyeballs; a circumstance which gives to the eyes their rose color. A continual winking agitates the eyelids; and the pupils contract and dilate frequently. They fly the light, the shining of which prevents them from perceiving objects; nor do they see distinctly, except during the twilight, and when the moon illuminates the horizon. This condition is often complicated with imbecility and idiocy. Wherever we meet with albinos, there we also find the goitrous and idiots. Albinos do not constitute a distinct race of men as has been pretended. The birth of an albino is an accident. He springs from parents, black, olive or copper colored, in the torrid zone. With us, he is born of parents whose complexions are of the usual whiteness, and whose remaining children resemble their father and mother. The constitution of albinos is generally debilitated, and their intellectual capacity feeble.

Do albinos reproduce their like? We do not know, as we are destitute

of observations on this point; still it is certain, that when united with healthy persons, they engender a healthy offspring. The *Kakrelaks* of Asia are regarded as fruitful. That worthy missionary, M. Dubois, who, for thirty years, preached christianity in India, baptized the infant of a female Kakrelake and a European soldier. This infirmity of the human species is more frequent within the tropics than in Europe. We meet with albinos in the Island of Ceylon, bearing the name of *bedas*, and that of *Kakrelaks* in America. The albinos of South Africa are called *dandos*.

Albinos were known among the ancients. We read in the fragments of Ctesias, that the Indians are black by nature and not from the influence of the sun. I have seen however, says this author, two women and five men who were white. Pliny relates that in Albania, at the foot of the Caucasus, we meet with individuals whose eyes are glaucous, who are white from birth, and who see better at night than during the day. Fifty years ago, they were accustomed to display at Paris, two albinos, who were born in the mountains of Auvergne. M. Blandin* states, that a friend of his was acquainted with a family of albinos in the environs of Paris. We all saw at Paris, fifteen years ago, an albino, who, it was said, came from the *Black Forest*, was well formed, although of small size and low stature, spoke several languages, was married, and had two children, who did not participate in the infirmity of their father. The chaplain of the hospital of ——, is an albino.

M. D., who is not far from fifty years of age, was the offspring of very healthy parents, but is an albino. His developments are like those of other children, although of a delicate constitution, and endowed with the usual share of intelligence. His disposition is very mild and acquiescent, though timid. Until the age of seven years, he did not see during the day, but after that period, habituated himself gradually to the impression of light, until he was enabled to see, and to distinguish objects which were at hand. He is myopic, and obliged to bring close to his eyes whatever he desires to see or to read. He received a most carefully conducted education, and profited by it to some extent, without however acquiring a remarkable degree of intelligence. Until his appearance in society when about eighteen years of age, he permitted his snow-white locks to fall freely over his shoulders. He then put on a wig and spectacles, and frequented society, in which he always appeared somewhat constrained. He is now married, and has two children whose complexions are very dark.

Every physician has visited Roche, an albino, who has been for a great many years an inmate at the Bicêtre. He was about thirty-four years of age when I saw him in 1821. He is of medium stature, of more than ordinary fullness of habit, his skin delicate, of a milky whiteness, with a slightly rose-colored tinge. The volume of his head is proportioned to the size of his body, and well enough formed; although the forehead is flattened. Measure of the head.

Circumference	21.65 in.
Curvature from the root of the nose to the occipital protuberance	12.00 "
Antero-posterior diameter	7.24 "
Transverse diameter	6.10 "
Total	46.99

The hair, both upon the head and person, is of a shining whiteness; and his eyelids are in constant motion. If the twinkling ceases, they remain

* *Dictionary of Medicine and Practical Surgery*, art. *Albino*, p. 454.

half closed. The ball of the eye is rose colored. Roche sees illuminated objects imperfectly, his vision is very limited, and he regards objects, like one suffering from myopia. He sees best in the shade, and is pleased to remain in his cell. His physiognomy is without expression, even when he is vexed. His step is awkward and uncertain, and his motions quick. He walks in his shirt, with naked feet; runs about without stockings, sings, cries aloud, and breaks whatever comes in his way. His voice is clamorous, and becomes acute when he is opposed. This albino has no connected ideas, and articulates imperfectly the few words that he has learned. Indeed, it is scarcely possible to understand what he wishes to say. He understands, when addressed respecting his habits, and the ordinary wants of life. He extends his hand for tobacco, and raises up his shirt, to which he has doubtless become accustomed by the allurement of money, which the curious have bestowed upon him. He eats largely, collects together whatever he meets with, is irritable but not perverse. He is much addicted to onanism. Some time since, he lost his hair, and now remains better clad, and can spend his time in a dormitory.

Cagots.—We give this appellation to a race of men who, plunged in the deepest calamity, pursued by contempt, abuse and disgrace, are found dispersed along the sea-coast, from the north, to the south of France. "In the solitudes of little Brittanny, says Ramond, they are known to have been treated with barbarity. Scarcely have they been permitted in the most highly civilized periods, to engage in the occupations of shoemakers and coopers. The parliament of Rennes was obliged to interfere, to secure to them the rights of sepulture. We find them at that time, known by the name of *cacous* and *cagneux*, and the dukes of Bretagne had commanded, that they should not appear in public without a distinctive mark. Towards Atheunis, we find a similar class concealed in the Island of Maillezais. La Rochelle is peopled with *coliberts* or slaves. They appear again under the name of *cahets* in Guienne and Gascon, refugees in the marshes, lagunes and heaths of those regions which have been for a long time uninhabitable. In the two Navarres, they are sometimes called *caffos*. They were thus called in the ancient *For*, which was compiled about the year 1074. We discover them finally, in the mountains of Bearn, Bigorre, and in the four valleys and province of Comminges. It was these *cagots* or *capots* that, in the eleventh century, we learn, were given away, bequeathed and sold as slaves; regarded here, as elsewhere, as infected and leprous persons; entering the church only through a small and separate door, and having their holy water and seats apart; that, in many places, the priests were unwilling to receive to confession, and to whom the ancient *For* of Bearn was thought to do a favor, by taking seven witnesses from among them, as evidence; who were, in 1460, the objects of a claim, on the part of the states of Bearn, who desired that they should be prevented from walking with naked feet in the streets, through fear of infection; and that they should wear upon their dress their former distinctive mark, the foot of a duck or goose.

The cagots were doomed from time immemorial to wretchedness, misery, ignominy and infirmities. Infamous and accursed, they were avoided and cast off by the population generally; banished into remote places, incapable of connecting themselves with the other inhabitants, or of engaging in any other occupations, than those of wood-cutters or carpenters. They were also obliged to march first to every fire, and render to the community the most degrading services. It was not until about the middle of the last century, that the parliament of Bordeaux passed a decree, by which it was forbidden to treat in an abusive manner, any pretended descendant of the race of Giezi, and to treat them as *agots*, *cagots*, *gahets* or *ladres*. They require also, the execution of the decrees of this court, of the 9th July, 1723, and the 22d of Nov. 1735, on penalty of a fine of 200 livres. The same decree commands, that the *gahets*

shall be admitted to all general and special assemblies which may be called by the inhabitants, to municipal charges, and to the honors of the church, like other persons. The parliament of Toulouse passed a similar decree, July 11th 1746, in confirmation of two former ones, passed during the month of August, 1703, and on the 11th of Aug. 1745. Ramond prepared a learned dissertation on the origin of this race of men, who presented the same physical characteristics, and the same intellectual and moral stupidity, in the different provinces. This savant has been able to offer, however, only conjectures. Are they the remains of those ancient people, who have successively made incursions upon Gaul? Are they the Sarrazins, a remnant who have escaped the sword of Charles Martel? Are they the leprous, who have been banished from society, and exiles in secluded and desert places, where they have degenerated; not daring to quit their retreat? It still remains to be explained, how beings so base and degraded, living away from society which disdains and treats them in the grossest manner, have maintained their existence for so many centuries. Lastly, since the beginning of the last century, prejudices having ceased to exist against these wretched beings; and Noguès, a physician, having raised his voice in their favor, and declared that they were strong, robust and intelligent men; the authority of parliament having also set limits to their state of idiocy; we now rarely meet with one of this unfortunate class; and I have only spoken of them here, with a view to bring to mind another proof of the deplorable effects which misery, contempt and ignorance, produce upon the human understanding.

In this place, we may naturally introduce a few considerations respecting savage races of men. Do savages exist? If we understand by this term, men endowed with intelligence, living alone, isolated, strangers to all civilization, without education, and having never had communication with others of their species, doubtless they do not exist. There are however, people who lead a wandering life in the woods, upon mountains, and on the banks of rivers; who are destitute of the blessings of civilization, and whom we call savages. They have few ideas. To render themselves intelligible, to exchange thoughts and desires, they have but a small number of words. They have sensations and passions; they compare and foresee; they exercise volition, and live in society. Doubtless their sensations are less acute, their ideas less, and their wants less than our own. Their foresight also is less, and their understanding is less cultivated. They are less civilized than men who inhabit our cities, and dwell in our capitals. Savages however, are endowed with the same faculties, and there is no difference between them and us, but that which exists between a man who has been educated, and one who has not; between the ignorant man, and him who has been instructed; between the man without experience, and him who has much of it; between the man who yields himself to the sway of brutal passions, and him who has learned to control them. And these men, found in the woods, towards whom the eloquence of the philosophers of the last century awakened the interest of the civilized world; whom they exhibited, with a degree of affectation, to public curiosity, as perfect men, superior even to Newton and Bossuet; only wanted education. Those wretched beings were not savages, but idiots; abandoned and fugitive imbeciles; whom the instinct of self-preservation, and a thousand fortuitous circumstances had preserved from death.

A criminal mother, or a family in distress, abandons an idiot or imbecile son; an imbecile escapes from the paternal mansion, and wanders in the woods, not knowing how to find his way back. Favoring circumstances prolong his existence; he becomes swift of foot, in order to avoid danger; and climbs trees to protect himself from the pursuit of certain animals which threaten him. Pressed by hunger, he nourishes himself with whatever comes to hand. He is timid, because he has been frightened; and is obstinate, be-

cause his understanding is feeble. This unfortunate being is found by huntsmen, brought into a city, conducted to a capital, placed in a national school, and committed to the charge of the most celebrated tutors. Both court and city, interest themselves in his past condition and education. Savans write volumes to prove that this is a savage, who will become a Leibnitz or Buffon. The observant and modest physician assures them that he is an idiot. They appeal from this decision, and commence writing and discussing the subject anew. The most approved modes of instruction, and the most intelligent cares are bestowed upon the education of this pretended savage.

But from all these pretensions, efforts, promises and expectations, what is the result? That the observing physician had judged correctly. The pretended savage was only an idiot. Such was the judgment of Pinel respecting the *savage* of Aveyron.* We may from this conclude, that men who are deprived of understanding, isolated, and found in the mountains and forests, are imbeciles, or idiots who have wandered away from their homes, or have been abandoned.

CASES IN ILLUSTRATION OF THE HISTORY OF IDIOCY.

Dargent, twenty-four years of age, admitted at the Salpêtrière Sept. 8th, 1820, is tall, the head voluminous, and the forehead high. The frontal protuberance of the right side is more salient than that of the left, whilst the projection of the occipital region is more marked on the left. The eyes are chestnut colored, her look vague, teeth handsome, the countenance swollen and flushed, the physiognomy stupid, the limbs well formed, and the skin white. She eats alone, but knows not enough to go for her food, and collects every variety of disgusting substance. Her dejections are involuntary. She does not speak, nor does she engage in any thing, unless it be to play with rags rolled up into the shape of a doll. Of a gentle disposition, she is rarely angry, and testifies by her caresses, her remembrance of persons who take charge of her. In the month of March, 1824, she was thrown down by an insane person. She was menstruating at the time, but by this accident, the menses were suppressed. For some days she refused food, but soon resumed her former habits. The menses however did not return. On the 18th of May, a continued cough was developed, attended with dyspnœa. On the 20th, her face was much flushed, the respiration difficult, the pulse hard and frequent, and the abdomen soft. We cannot determine the amount of the expectoration, which is swallowed. She was bled, gum water, and loch were given her; and on the 21st there was a remission. Leeches to the anus. On the 22d, as the cough persisted, a vesicatory was applied to the arm. On the 24th, the oppression was very considerable, and a vesicatory applied to the chest. On the 26th, oil was given to counteract the constipation; 27th, alvine dejections; 28th, abdomen painful, and fifteen leeches applied; 29th, persistence of the pulmonary symptoms, attended with a diarrhœa; 31st, laborious respiration, and diarrhœa; on the 2d of June, she died, and the body was examined.

Autopsy.—Head large, and the bones of the cranium thickened and more dense than natural. Arachnoid slightly injected; convolutions less numerous than usual, and shallow, particularly on the left side; lateral ventricles very much shrunken, particularly that on the right side; cerebellum of normal consistence, and less dense than the brain; lungs tuberculous and cavernous. There was serum in the pericardium, and the heart was small. The stomach contains the puriform substance which was thrown from the lungs, and swal-

* Nothing can be more interesting, than the two reports of Dr. Itard, on the wonderful attention which our confrère lavished upon this idiot, to develop his understanding.

lowed during life. Mucous membrane of the intestines reddened at certain points. Proportions of the plaster cast of the head:

Circumference	21.37 in.
Curvature from the root of the nose to the occipital protuberance	13.38 "
Antero-posterior diameter	7.20 "
Bi-temporal diameter	5.59 "
Total	47.54

Delatre, about twenty-one years of age, is the daughter of an imbecile father. She is small in stature, head small, and forehead low. At the height of two fingers' breadth above the superciliary arches, the cranium is flattened, and we observe a more marked depression at the crown of the head. The eyes are red, and almost fixed, the look vague, the external commissures of the eyelids is higher than the internal, and the pupil dilated. From infancy, she is partially deaf, but from the age of nineteen years, her deafness seems to have diminished. The nose, which is depressed at its root, terminates in a point. The upper lip is thicker than the lower, by several lines. The chin is bifurcated, and tends upward. The physiognomy is expressive of sadness. Admeasurements of the head upon the living subject:

Circumference	20.47 in.
From the curvature at the root of the nose to the occipital protuberance	12.28 "
Antero-posterior diameter	7.24 "
Bi-temporal diameter	6.18 "
Total	46.17

She has a heavy, sluggish gait, and is incapable of running. She does not take a firm hold of objects with her hands, nor can she handle a broom. She remains isolated from her companions; sitting usually upon the ground, and raking about the earth. She also collects together rags, and unravels them. She has a habit of holding a cord between her teeth, and with one of her hands, while with the other, she causes it to vibrate. Does any one approach her, she regards them with a savage expression. Does she see signs made by any one, she gazes with her mouth open. She dresses and undresses herself without assistance, but is incapable of taking any farther care of her person, and willingly receives such things as are given her. She is fond of changing her linen, and awaits, with pleasure, the arrival of the Sabbath, that she may be clad in her neatest attire. During the distribution of food, she becomes angry if required to wait, and is not served before the rest. She smells her food, and rejects it if not agreeable to her. If she sees any thing given to her companions to eat, she signifies by signs that she would not be forgotten. She recognizes her father, and caresses him. She is grateful, but this sentiment is evanescent; and testifies her satisfaction by a sort of grunt, which is peculiar to her. She robs, retains, and defends what she has taken. She never gives away any thing, and is obstinate only in preserving either the rags which she has collected, her food, or the fruits of her robberies. Is she opposed, she utters a cry, but articulates no sound. At certain periods, particularly those of menstruation, she becomes irritable and choleric; springs at the person, and tries to seize hold of, and strangle those who displease her. When she has permitted herself to commit an act in anger, and has struck any one, she immediately flies. She is destitute of the sense of shame, loves

to remain naked, and appears to be occupied in considering her person. Very much given to masturbation, the presence of men seems to produce no effect upon her. She sleeps well, is never sick, and menstruates regularly.

Grous is nineteen years of age. Her mother while nursing her, was frightened by a mad woman, who endeavored to take this child by force from her arms. Her understanding did not unfold in proportion to the development of the body, and when eighteen months old, she suffered from confluent variola. She did not begin to walk, until two years of age. When three years old, she had a severe attack of disease, and from that period, there was a complete arrest in the development of the understanding. At the age of seven years, the physical forces were reëstablished, and at fourteen, a spontaneous eruption of the menses took place.

She is tall; her head is small, flattened, and slightly developed. The occipital region is remarkably small. The hair and eyebrows are of a chestnut color; the forehead is narrow; the eyes blue; and the lower lip, which is the larger, is projecting. The teeth are in a good state of preservation; the skin is sun-burnt, and the physiognomy stupid. Admeasurements of the head, taken during life.

Circumference	19.84 in.
From curvature at the root of the nose to the occipital protuberance	11.14 "
Occipito-frontal diameter	7.00 "
Bi-temporal diameter	5.74 "
Total	43.72

Her limbs are well formed, though her gait is awkward, slow and hesitating. In walking, she extends her hands, like an infant who is essaying his powers. Her head is inclined towards the earth, and her body is very prone. She sits habitually, either on the ground or upon a bench, holding in her hand a doll, with which she plays; or rolling up in her fingers, her clothing and bonnet. If she is walking and is stopped, she does not appear either angry or impatient. At night, she leaves her bed, and runs about, without a motive, in the dormitory. Since the age of fourteen years, the epoch of her first menstruation, she has become perverse, especially at the menstrual periods, and throws down her companions without any provocation. If vexed at one of her associates, she lacerates her own skin, and accuses the person, who has in one way or another opposed her. During these attacks of anger, she throws about her wooden shoes. She is extremely obstinate and timid, and conceals herself if spoken to with severity; but immediately begins again, what had provoked the language of censure. She has never been able to learn any thing, nor is she acquainted with those things which relate to the first wants of life, nor does she recognize the persons who have the constant care of her. It is necessary to dress her, make her bed, and carry to her her food, upon which she seizes with voracity. She can only articulate monosyllables, and that with difficulty; thus creating a jargon which the children comprehend better than her mother. Is she presented with any thing that pleases her, she emits from the trachea the articulate sounds *hé, hé, héou*, and smiles. Her voice is infantile, drawling and shrill. She retains a single air, which it pleases her to trill. She fixes her attention upon objects that surround her; but has no memory farther than to recall what has been promised her. If any one puts money in her hand, she hastens to purchase dainties with it. She understands its value, and if any one endeavors to deceive her, she is vexed, and becomes angry, though she has no words wherewith to express this sentiment. Although she appears to be incapable of chagrin and

ennui, and since the time of her admission into the hospital, has testified neither regret nor surprise. She receives her mother with satisfaction, when she comes to visit her. She recognizes the nurse who has charge of her, and sometimes manifests her generosity by giving to her some of the articles which her mother brings. She is particularly pleased with children. Although fond of the toilet, she is unable to keep a garment more than a few days without tearing it in pieces, to make a species of doll. The presence of men agitates her powerfully, and her feelings betray themselves by a smile, a reddening of the face, and by actions (by no means equivocal), which she does not dissemble, even in the presence of several persons. Is a man near her, she pretends to suffer from pain in her bowels, prostrates herself upon the earth like epileptics, and imitates their convulsions. So soon however as any one threatens her, or throws water in her face, she ceases the game. The functions of nutritive life are properly executed, and her menses regular.

Brikton, aged twenty years, is the offspring of a healthy mother, and a father who is habitually in a state of intoxication. She has two brothers, who were never capable of learning to read. She came into the world in a pitiful condition, and it was only after two years' nursing, that she learned how to find the breast of her mother. It was at this age that she began to draw herself about upon her knees, her hands and limbs; and pronounce the words *papa* and *mamma*. She had convulsions during both her first and second dentition. She did not walk previous to her seventh year, and at twelve was very small; after which period her growth was rapid. She was not accustomed to play with children of her own age, but knew how to defend herself. At fifteen years of age, the menses appeared, but were shortly after suppressed for eight months; since which period they have been both regular and abundant. She is of medium stature; of a very full habit; and her head is small in proportion to the size of the face. The hair is of a brown color, and abundant in quantity; the forehead narrow and low. The right eye is blue, and the left red; the nose is large, and flattened at its root; the mouth large; the lips thick and projecting; the teeth poor, and the jaws large. The chin is round, the neck short and large, and the face injected and sunburnt. The physiognomy is composed, but without expression. Admeasurements of the head:

Circumference	19.13 in.
From the curvature at the root of the nose to the occipital protuberance	12.24 "
Antero-posterior diameter	7.08 "
Transverse diameter	5.63 "
Total	44.08

The limbs are short and large, and the breasts developed. She moves slowly, her step is awkward, and she extends her hands when walking. She notices what is passing around her, and appears to be occupied with it. Thus, on seeing one of her companions put on a pair of shoes, she understands, and says, they fit well. She responds accurately enough, to such questions as are addressed to her. She was able to learn but a few of the letters; and never, either to read or write. She has a little memory, and recalls certain events which transpired in her own family, of which she was a witness; but confounds them when wishing to speak of them. If any one enquires her age, she replies; "I don't know, but mother does." She is acquainted with the value of certain pieces of money, and makes a proper use of it. Although she knows the name of the street in which her parents reside, she never recognizes it a second time. It was with much difficulty that she was taught to dress herself. She was never able to knit; but goes to look after her food. She some-

times discharges the severest labors of the hospital. Her disposition is mild. She loves her mother, and those who have the charge of her. She becomes angry when provoked, but possesses the sentiment of shame and modesty. She is not fond of play, lives isolated, without inquietude or ennui; often repeating that she is free from anxiety. Her physical health is good.

Barboulax, twenty years of age, dismissed from the hospital for incurable women, at the age of fourteen years, is of the ordinary stature. Her head is large, and the forehead, which is of moderate elevation, is flattened at the sides. The frontal protuberances are slightly marked, and separated by a trifling depression. The hair, eyebrows and eyelashes are very black. A few white hairs are noticed on the forehead. Her eyes,—concealed by enormous cheeks,—of a chestnut color, and moist, open languidly and without expression. The nose is large, the mouth wide, face flushed, the physiognomy timid and infantine, and the neck short.

Circumference of the head	21.26 in.
From curvature at the root of the nose to the occipital protuberance	12.71 "
Antero-posterior diameter	7.20 "
Transverse diameter	5.90 "
Total	47.07

The limbs are well developed, but large, and the movements awkward and heavy. She walks but little, and is habitually seated upon the haunches, in a corner of the dormitory, without an idea of going into the court. When any one looks at her, she conceals her face with the fore arm, and with the hand of the other arm rapidly rubs her clothing. If an attempt is made to remove her arm, she resists; and if force is employed, she blushes, weeps, and appears like one in ill humor. Though habitually tranquil, she gets angry when opposed, bites, kicks, and throws her wooden shoes. If struck, she remains disconcerted, and says, *beaten*. She is sensible both to praise and censure; possesses the sentiment of shame and modesty, and easily entertains feelings of jealousy. Previous to her admission into the Salpêtrière, she threw a child from a window, whom she saw, with feelings of jealousy, affectionately caressed, and manifested no regret in consequence of it. She knew no sadness, ennui nor coquetry. She expresses her thankfulness to the servant girl who takes care of her, and is particularly affectionate to one of her companions. Her vocabulary is limited to a small number of words. She says *yes* and *no*, often unseasonably; and *beaten*, when she is struck. She knows how to dress herself, but is not always very successful. Some one is obliged to wash her, and comb her hair. She does not know how to look after her food, and if it is not brought to her, will not call for it. She never calls for any thing, but collects, either clean or filthy rags, for the purpose of making various kinds of dolls. Her general health is good, and the menses are regular.

Coulmin, twenty years of age, is small and rachitic, of a slender habit of body, skin sunburnt, the left temple greatly depressed, the forehead high, and the vertex slightly flattened.

Circumference	20.70 in.
From curvature at the root of the nose to the occipital tuberosity	12.20 "
Fronto-occipital diameter	6.88 "
Bi-temporal diameter	5.78 "
Total	45.56

Her hair is blond, her eyelids are inflamed and red, her eyes small and blue. Her nose is short, lips thick, and the saliva flows from the mouth. The chin is round, and the pavilion of the ears very large. The limbs are very slender, the head is inclined forward, and the back much arched. Her step is insecure; one foot scarcely touching the earth before it is taken up, and the body advances hesitatingly. Her look is besotted. When laughing, she opens the lips so much as to expose completely the teeth. She eats largely, and feeds upon the filthiest articles. If hungry, she stamps with her feet; and calls the nurses *sluts*, when they are tardy in bringing her food. The dejections are involuntary, and her turns have never appeared. She is quiet, and sleeps at night, but soils her bed. When she has risen and is dressed in the morning, she is conducted to a bench, where she seats herself upon the haunches, the chin being placed upon her knees, and balances herself constantly from before backward. She rarely walks. She knows only the nurse who has charge of her. It is necessary to get her up, wash and dress her, and undress her before retiring at night. Attentions to cleanliness vex her, and she often repeats the words *beast* and *hog*, to express either her dissatisfaction or anger; or else some desire, which is limited always to a craving for food. She is not deaf, and the striking of the clock apprises her of the hour for the distribution of food. When any one speaks to her about walking, she quits her bench and takes a few steps. She tries to sing, by repeating *la la la la;* and when she utters one of the two or three words which form her vocabulary, her voice is harsh; imitating the low mewing of a cat. Indifferent to everything, she seems to be destitute of modesty. She laughs and weeps, is obstinate and choleric. Her countenance then becomes flushed, and the mucus which habitually escapes from her mouth, becomes augmented. She spits in the face, and bites others and herself. Nothing seems to frighten her, and she manifests no sentiment of recognition. It is necessary for her to wear the camisole, to prevent her from washing herself with her urine, from rolling in the gutters, and even the privy, and also from collecting the filthiest ordure.

Brault, aged twenty-six years, entered the Salpêtrière September 3d, 1812, at the age of sixteen years. She is of medium stature, and her head is small, particularly the posterior portion. She carries her head, alternately, on the right and left side. Her hair is chestnut colored, her eyes are blue, moving convulsively, and cannot remain a long time fixed. Her forehead is flattened at the sides, narrow, and almost pointed. The lips are constantly separated by a convulsive laugh. Two of her incisor teeth are very large and projecting; the chin also is very voluminous, forming a double fold. The face is gross and flushed. The physiognomy is without expression, the limbs large and short, the fingers small and slender. This last peculiarity is frequently noticed among idiots. Admeasurements of the head, taken from the living subject:

Circumference	20.55 in.
From the root of the nose to the occipital tuberosity	13.50 "
Antero-posterior diameter . . .	6.88 "
Bi-temporal diameter	6.10 "
Total	47.03

It is necessary to get her up, and dress her in the morning, and to undress her at night. She does not go for her food; yet utters the word *pignon* when she desires food, and *agnon*, when she wishes drink. She seems to be pleased, when her food is handed her, and seizes upon it gluttonously. Her appetite is very great, and her dejections involuntary. She passes the day, seated upon

a bench or the ground. She often has a needle in her fingers, which she passes again and again, through some rags. When she retires at night, she says to the chamber-maid; *good night, nurse.* She walks awkwardly, and moves her hands convulsively when walking. She cannot run, and if it rains, she does not seek a shelter. Although her intellectual faculties are very limited, she does not seem to be an entire stranger to what is passing around her. She recognizes the sound of the clock which announces the hour for food. She articulates, more or less imperfectly, five or six words, and the sounds which she utters, are very dull. We sometimes hear her sing the four following syllables: *la la la la.* She is very choleric, particularly at the menstrual periods, or when provoked; throwing her clogs at the head of the person who excites her anger. She is also very obstinate. It is but three months since the death of her mother, to whom she no longer refers; though she was accustomed to receive her with pleasure, and to caress her at every visit. She recognizes the servant girl, but manifests no gratitude for her attentions. If threatened, she weeps. She possesses not the sentiment of modesty. She knows not how to play, but keeps some rags in her hand, which she twists about awkwardly in her fingers.

Laguette, about fifty years of age, is of the ordinary stature. Her head, which is greatly inclined forward, is small, and flattened at the sides; the occiput is slightly projecting, and the forehead, which is elevated, retreating. The frontal protuberances are slightly marked. The hair is of a brown color, sprinkled with white; the eye-brows are similar in color, and the eyes small, red and crossed. The nose is large and long, the mouth of medium size, and the lips are pale, thin and wrinkled. The incisor teeth are wanting, the chin is round and turned up, the complexion is dark, and the countenance flattened and wrinkled. The physiognomy expresses astonishment and stupidity. The measure of the head furnishes the following proportions:

Circumference	20.11 in.
From the curvature of the nose to the occipital tuberosity	12.79 "
Antero-posterior diameter	7.16 "
Bi-temporal diameter	5.67 "
Total	45.73

She applies her hands to her person, and makes sudden motions with her head, similar to those which we see in sheep. The limbs are developed, she walks slowly and awkwardly, turns her attention to what is going on around her, distinguishes objects, and understands what is said to her. She repeats several times in succession, and with energy, the monosyllables *bê, bê, bê,* when any thing strongly interests her. She knows how to indicate to the nurse where her shoes should be, even when she has deposited them some time since, in a corner. She is extremely indolent, and is sometimes noisy during the night. The dejections are involuntary, both night and day. She flies, whenever her companions manifest a disposition to strike her, but attacks no one. When angry, she hurls her clogs against the walls, overturns the household utensils, tears her clothing, stockings and chemise; after which, she betakes herself to the nurse, and requests her by signs, to repair what she has just torn in pieces; expressing her satisfaction, when her garments are again put in order. To prevent her from mischief, they are obliged to confine her to her bed; which, however, does not prevent her from destroying with her teeth, the camisole, in order to disembarrass herself. She experiences a sense of hunger, but it is necessary to bring to her her food, which, before touching, she examines with care, both by the senses of sight and smell. She eats

much, and loves to smell of flowers. It is necessary both to dress and wash her, though I have endeavored to make her dress herself. She has succeeded, —either well or ill—and puts on the camisole without repugnance. If she is arrested in this act by any obstacle, she seeks for aid, by making some sign, by bleating, or by scratching her forehead or head quickly, and several times in succession.

She expresses her thanks when clean linen is given her. She loves to see people well clad, and salutes, and even does reverence, at the desire of the nurse, to persons who give her tobacco, which she seizes with avidity, and conveys quickly to her nose. She possesses no sense of modesty, and is often naked; appearing to regard herself with pleasure. She is much given to onanism. She is alive to reproaches, and weeps; but her regrets are momentary, and she is soon guilty of the fault, which has just cost her censure. This idiot learned the air, *Vive Henri IV.*, which she sings, while repeating *bé, bé, bé*, and turning round and round. Her menses have long ceased, nor has she seemed to experience, in consequence of this occurrence, the least change in her health, which is excellent.

Ferrandier, twenty-two years of age, whose stature is somewhat above the medium size, has a sunburnt, though pliant and soft skin, and a small head, which is habitually inclined forward, and to one side. The cranium is but slightly developed, in comparison with the face; the forehead is narrow, the occiput flattened, and the vertex elevated. The hair is brown and abundant, the eyes blue, the eyelids thickened, and slightly opened, and the look ambiguous. The jaws are large, the nose is small, the lips are prominent, inclining upward, and partially open. She conveys into her mouth with the tongue, the mucus which is constantly discharging from her nostrils. Her teeth are white, chin round, physiognomy stupid, neck short and large, breasts voluminous and pendant, and the pelvis large. The superior extremities are small and without strength; the lower are short, and infiltrated during winter, and the right side is weaker than the left. The measures of the head are taken over the face.

Circumference	19.40 in.
From curvature at the root of the nose to the occipital tuberosity	11.61 "
Antero-posterior diameter . . .	6.65 "
Bi-temporal diameter	5.31 "
Total	42.97

She walks very slowly, cannot run, nor ascend a stairway without assistance. She remains seated in the court and upon the earth, usually in the same place. She is epileptic, and the attacks return every seven or eight days. The dejections are, during the night, involuntary. She understands what is said, and replies to the questions that are addressed to her. She is susceptible of attention to the objects that are presented to her, and to what is passing around her. Still she is incapable of doing the least thing. It is necessary to dress, comb and wash her. She plays with dolls, and, excepting errors, counts a hundred. She keeps the money that is given her, and saves it to purchase dainties.

She trills certain airs that she has heard, and entertains an affection for one of her companions, whom she embraces tenderly and often. It was observed that she had a falling out with her companion, which lasted eight days; during which period, she no longer sought for, nor embraced her. They at length became at one again, judging from their embraces. She is very grateful for the attentions that are paid her, but is obstinate, and easily made

angry. She then strikes, bites and tears every thing that comes within he rreach, and it becomes necessary to restrain her with the camisole. She is insensible to reproaches, and inaccessible to fear. She has no sense of modesty, and is pleased in being near to men. The health of this idiot is good, and her menstruation regular.

Gaudin, admitted at the Salpêtrière April 7th, 1824, at the age of twenty years, is scrofulous and rachitic, as well as deaf and mute. The head is small, forehead narrow, and the temporal regions developed. The eyes are small and blue, the look is crossed and fixed, the hair of a chestnut color and the teeth handsome. The face is flushed, and the physiognomy without expression. The limbs are very slender, habitually bent, and contracted at the left side. Deprived of all sensation, and not expressing, even by gestures, the first wants of nutrition, it is necessary to introduce food into her mouth when she swallows it. The dejections are involuntary. Passing most of her time in bed, she remains in the same position, and if uncovered, her limbs move convulsively, particularly to the right, and she manifests impatience. Many efforts have been made to seat her in a chair, but she slides from it, and permits herself to fall. Her sensibility has often been interrogated by pinching; but she manifests no sign of pain. She has never been regular. Since her admission into the hospital, her health has suffered daily. She has become very much emaciated, and the features of the countenance are expressive of uneasiness. In vain did we explore the different cavities; in vain did we watch for some indication, that might explain her progressive and rapid emaciation; and she died on the 26th of June, one month and a half after her admission into the hospital.

The post-mortem examination was made on the day following, at the clinic. The bones are slender, and friable to such a degree as to be destroyed by maceration. The cranium is small, the dura-mater healthy, and the convolutions atrophied and very compact. The arachnoid, which is injected, presents, at the level of the frontal protuberances, two osseous points, from three to four lines in diameter, and adheres to the cortical substance, throughout a great extent of the hemispheres. This substance is red, while the white is injected, and a little soft. The corpora striata and optic thalami, are greatly injected. The capacity of the ventricles is but slight, and the cerebellum equally injected. The annular protuberance is less dense than usual, the spinal marrow slightly consistent, the lungs are hepatized, the heart is small and flaccid, and the mucous membrane of the stomach is soft and red. Proportions of the plaster cast taken after death.

Circumference of head	19.48 in.
Antero-posterior curvature . . .	11.41 "
Occipito-frontal diameter	6.57 "
Bi-temporal diameter . . .	5.63 "
Total	43.09

Audry, twenty-three years of age, is of medium stature. The head is large, the occipital region developed, and the forehead narrow and flattened. The eyes are very black, and sometimes crossed; and the lids are often, and closely, shut. She often covers them. The hair is very black and crisped, the complexion of the face is of an olive color, while that of the person is brown. The nose is large and flat, lips large, teeth beautiful, ears very large, feet large and flat, the breasts hard, and the physiognomy stupid. The admeasurements of the head were taken from the living person:

Circumference	22.44 in.
Curvature from the nose to the occiput .	12.51 "
Antero-posterior diameter . . .	7.67 "
Bi-temporal diameter	5.94 "
Total	48.56

The limbs are well developed. She does not walk however, but remains always seated upon her heels, now upon the ground, and now upon an arm-chair; balancing herself backwards and forwards, exposed to every variation of temperature, with no other clothing than a chemise; looking to the right and left, without understanding what is demanded of her, and probably without comprehending any thing that is going on around. She occupies herself however, much of the time, in looking at her hands, which she brings very near her eyes.

The instinct of this idiot is almost null. She only knows the person who is in the habit of attending upon her, or giving her tobacco. She not only does not speak, but merely pronounces the following syllable, which she repeats incessantly, and with the more vivacity, whenever any thing impresses her in an agreeable or painful manner. *Brou, brou*, is her only language, which she is almost constantly muttering; and which has caused her to receive, in the hospital, the name of *Bourdon*. It is necessary to dress her, and put her to bed like a child, and to carry to her her food, which she devours with voracity, after having smelled of it. She is very timid, and the least noise frightens her. She expresses her fright, by gathering her whole body, so to speak, into the greatest degree of compactness possible. Her fright having passed, she endeavors to laugh. She has no affection for any one, nor the instinct of self-defence, when smitten. She has an excessive fondness for tobacco. She presents not her hand, but her arm, to every person who passes near her; and when they have placed some tobacco upon it, she conveys it with a sort of avidity and sensuality, first to her nose, and afterwards to her mouth. She licks, both her chemise, and the bench on which she has been sitting, if the smallest quantity of tobacco still adheres to them. When she has no more, she expels from her nose what she has just snuffed up, in order afterwards to swallow it.

An effort has been made, to cause her to understand that she must dance, if she wishes to obtain tobacco. Then, at the slightest intimation, and especially, when she is shown tobacco or a snuff box, she jumps about, her feet in motion under her, and her arms extended upward. Her hearing seems to be imperfect, for it is necessary to speak several times, to attract her attention; but the sight of tobacco is sufficient to arouse her solicitude. Whilst I was getting a sketch of her, I was accustomed to give her apricots, the pulp of which she ate; but not succeeding in biting the stone, she swallowed it. She possesses not the sentiment of shame. I have often seen her, seated upon an arm-chair, playing with her breasts, the nipples of which she would twist round with her fingers. I have also seen her urinate, and notice with a sort of curiosity, the urine as it passed off in a stream. Her other necessities were satisfied involuntarily, wherever she happened to find herself. In other respects, she is well; and the menses are very regular and abundant. She gives herself up to the practice of onanism to a frightful extent, in open day, and in the presence of every body. Several times in my own, and the presence of the draughtsman, she endeavored to gratify this inclination, without seeming to suspect that she was in the presence of any one. Her physical insensibility is such, that by pinching her, or drawing a feather over her lips, or eyelids, it was impossible for me to produce the least indication of sensibility. Since the time of her admission, which was six years since, she has somewhat im-

proved. She knows how to intimate, by signs, that she has not been served to her food, permits herself to be clothed, and assists in putting on her clothing; she puts a bonnet on her head, takes the same chair, which is pierced, draws it to the same place, puts upon it a night vessel, and seats herself thereon. When unable to obtain tobacco, either by gestures or murmurs, she leaves her seat, and makes mimic efforts to effect her purpose. In 1826, Audry was seized with the confluent form of variola, and died with it on the sixth day. During her illness, she did not manifest the least pain. When food was brought, she testified no desire either to eat or drink, but accepted whatever was conveyed to her mouth.

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